520

SERVICE MANUAL

FISHER

AUDIO COMPONENT SYSTEM

MC-620

(EUROPE)

132 295 43

SPECIFICATIONS

Amplifier Section

Minimum RMS sine wave power per channel at 8 ohms within rated bandwidth at no more than rated THD ..... 2.0 Watts
Power Bandwidth ..... 100 Hz – 10 kHz
Total Harmonic Distortion ..... 5 %

FM Tuner Section

Usable Sensitivity ..... 4.8 μV/18.82 dBf
Signal-to-Noise Ratio ..... 60 dB
Stereo Separation at 1 kHz ..... 30 dB

AM Tuner Section

Usable Sensitivity ..... 600 μV/m
Signal-to-Noise Ratio ..... 45 dB

Record Player Section

Wow and Flutter (WRMS) ..... 0.35 %
Rumble (DIN-B) ..... more than 50 dB

Cassette Section

Frequency Response ..... 125 Hz – 10 kHz
Wow and Flutter (WRMS) ..... 0.15 %
Channel Separation ..... 36 dB

General

Power Requirements ..... AC 220 V (110 V) (50 Hz) ..... 35 Watts
Dimensions (W x H x D) ..... 405 x 204 x 420 mm
Weight (approx.) ..... 5.5 kg

– Specifications and design are subject to change without notice.–

REFERENCE No. WM-22536

520

CAUTION ON RF ADJUSTMENT

This model uses a microprocessor for memory preset control for the various bands.
This function has been used to preset frequency points for the different bands to permit adjustment and make it possible to check the function of the microprocessor. To use this supplemental function, ground initialize test point TP601 for 1 second before beginning adjustment. The following table shows the initially preset frequencies.

Band	Memory					
	1	2	3	4	5	6
FM-1	87.5MHz	108MHz	88MHz	98MHz	93MHz	103MHz
AM	522kHz	1629kHz	603kHz	1404kHz	999kHz	801kHz

AM TUNER ALIGNMENT

AM ALIGNMENT – Band Selector switch to AM position.
Maintain generator output as low as possible for suitable indication.

Note: Perform this alignment after FM Tuner Alignment.

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. AM IF ALIGNMENT	Connect 450kHz Radio IF Genescope output to TP2 and ground. Adjust output level to 90dBμV.	Position of non-interference Minimum Frequency.	Connect Radio IF Genescope input to TP4 and ground lead to chassis.	Adjust AM IFT (L107) for maximum gain and best symmetry. Keep signal low enough for noise on response.
2. AM RF FREQUENCY COVER ALIGNMENT (522kHz)	Do not connect generator.	Set Preset STATION button to "1" position. Set to 522kHz.	Connect DC Voltmeter to TP9 and ground lead to chassis.	Check DC Voltmeter for Indication 0.8V ~ 1.4V.
3. (1629kHz)	Same as above.	Change Preset STATION button to "2" position. Set to 1629kHz.	Same as above.	Check DC Voltmeter for Indication 7.0V ~ 9.0V.
Note: Repeat the adjustments in Items 2 and 3. Then, confirm that each voltage becomes 1.0V to 7.9V at receiving frequency of 522kHz to 1629kHz. **(See Table 1)**				
4. AM RF TRACKING ALIGNMENT (603kHz)	Connect Standard Loop Antenna to output terminal of AM RF Signal Generator. Place Loop Antenna 60cm away from Loop Antenna (Unit). Generator Setting to 603kHz or 1404kHz. Modulate with 400Hz (30 % modulation).	Set Preset STATION button to "3" position. Set to 603kHz.	Connect DC Voltmeter to TP8 and ground lead to chassis.	Adjust AM Antenna Coil (L108) for maximum gain output.
5. (1404kHz)		Change Preset STATION button to "4" position. Set to 1404kHz.	Same as above.	Adjust AM Antenna Trimmer (TC103) for maximum gain output.
Note: Repeat the adjustments in Items 4 and 5. Then, confirm there is no tracking error.				
6. AM AUTO STOP SENSITIVITY ADJUSTMENT	Change Signal Generator setting to 999kHz. Adjust attenuator output for 60dBμV/m.	Set Preset STATION button to "5" position. Set to 999kHz.	Front Panel TUNED Indicator Display.	Adjust VR602 until the TUNED Indicator partly light up.

Use a screwdriver with plastic grip for all adjustments.

AM Frequency Cover Range
Tuning Voltage Value at TP405

(Table 1)

	522kHz	1629kHz
Minimum	0.8V	7.0V
Typical	1.0V	7.7V
Maximum	1.4V	9.0V

FM Frequency Cover Range
Tuning Voltage Value at TP405

(Table 2)

	87.5MHz	108MHz
Minimum	1.1V	7.5V
Typical	1.3V	8.3V
Maximum	1.6V	9.0V

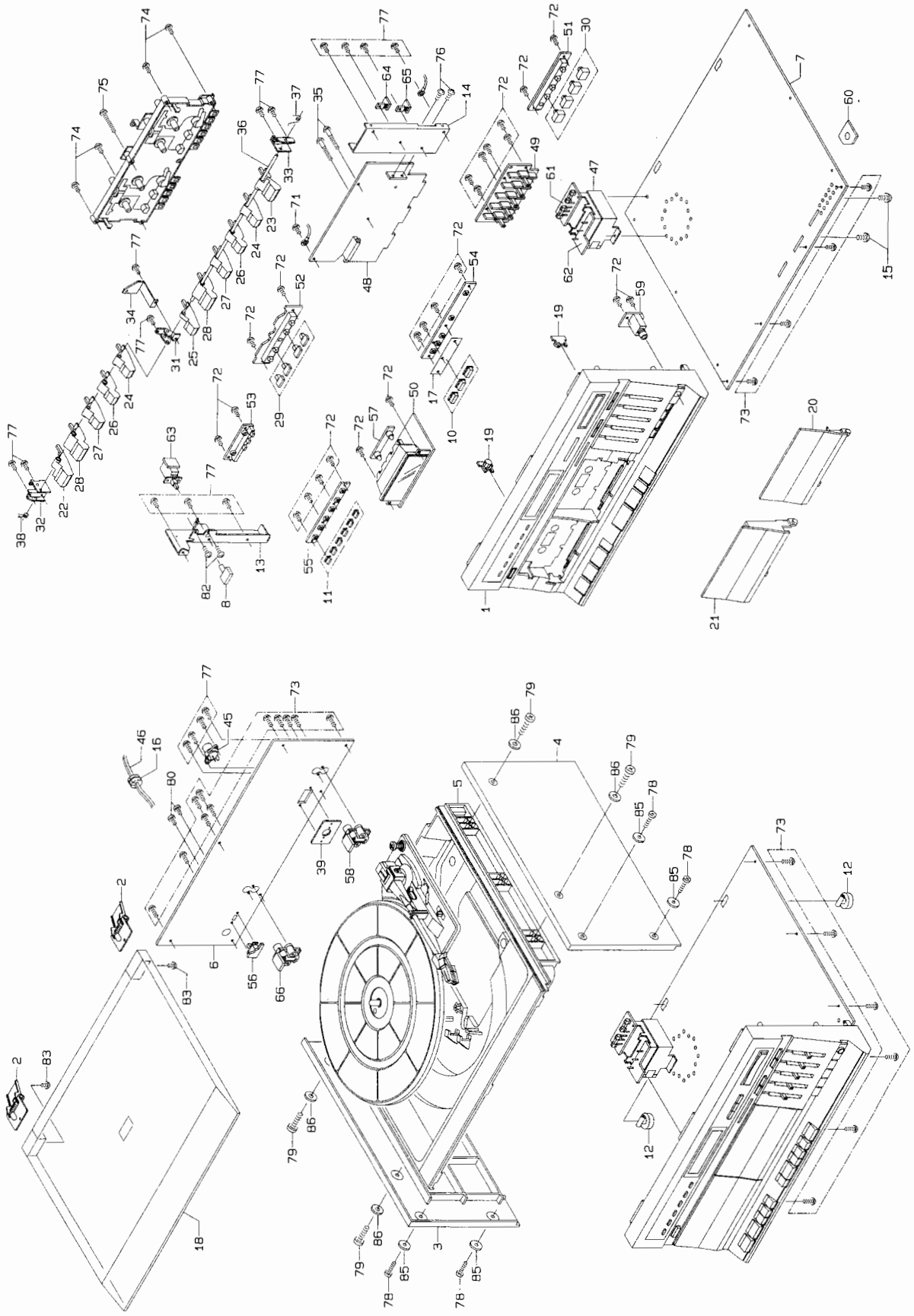
FM TUNER ALIGNMENT

FM ALIGNMENT – Band Selector switch to FM STEREO/MUTE position.

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. FM IF S-CURVE ALIGNMENT	Connect 10.7MHz Radio IF Genescope output to TP1 and ground lead to chassis. Use 5pF capacitor in series with generator output lead.	Position of non-interference Minimum Frequency.	Connect Radio IF Genescope input to TP3 and ground lead to chassis.	Adjust FM DET Coil (L110) and FM IFT (L106) so that S-wave form becomes symmetrical.
2. FM RF FREQUENCY COVER ALIGNMENT (108MHz)	Do not connect Generator.	Set Preset STATION button to "2" position. Set to 108MHz.	Connect DC Voltmeter to TP9 and ground lead to chassis.	Adjust FM OSC Coil (L105) until DC Voltmeter reads 7.5V ~ 9.0V.
3. (87.5MHz)	Same as above.	Change Preset STATION button to "1" position. Set to 87.5MHz.	Same as above.	Check the DC Voltmeter reads 1.1V ~ 1.6V.
Note: Repeat the adjustments in Items 2 and 3. Then, confirm that each voltage becomes 1.3V to 8.3V at receiving frequency of 87.5MHz to 108MHz. **(See Table 2)**				
4. FM RF TRACKING ALIGNMENT (88MHz)	Connect FM RF Signal Generator through FM Dummy Antenna to FM Antenna terminals. Set Generator to 88MHz or 108MHz. Modulate with 1kHz to provide ±75kHz deviation. Set Generator output with attenuator as low as possible.	Set Preset STATION button to "3" position. Set to 88MHz.	Connect DC Voltmeter to TP8 and ground lead to chassis.	Adjust FM Antenna Coil (L102) and FM RF Coil (L104) for maximum gain output.
5. (108MHz)		Change Preset STATION button to "2" position. Set to 108MHz.	Same as above.	Adjust FM ANT Trimmer (TC101) and FM RF Trimmer (TC102) for maximum gain output.
Note: Repeat the adjustments in Items 4 and 5. Then, confirm there is no tracking error.				
6. FM IFT ALIGNMENT	Set generator to 98MHz ±2kHz. Adjust attenuator output level for 15dBμV.	Set Preset STATION button to "4" position. Set to 98MHz.	Connect AC VTVM and Oscilloscope to SPEAKER Terminals.	Adjust FM IFT (L106) for maximum gain output.
7. DETECTOR ADJUSTMENT (MINIMUM T.H.D.)	Same as above. Adjust attenuator output level for 60dBμV.	Same as above.	Harmonic Distortion Meter to SPEAKER Terminals.	Adjust FM DET Coil (L110) for minimum gain and best lineality.
Note: Repeat Step 6 (FM IFT L106) and 7 (FM DET Coil L110) until optimum alignment is reached.				
8. FM MUTING LEVEL ADJUSTMENT	Same as above. Adjust attenuator output level for 18dBμV.	Same as above.	Scope vertical input to SPEAKER Terminals.	Set Band Selector Switch to FM STEREO/MUTE and Adjust VR601 until the received wave form becomes half of the maximum form.
Note: Decrease the output level of attenuator and confirm that the wave form disappears. Increase the output level of attenuator again and confirm that input level meets the specifications sufficiently when the wave form has appeared.				
9. FM STEREO SIGNAL SEPARATION CONTROL	Connect FM Stereo SG to FM Antenna terminals. 19kHz signal ON. Main channel, sub channel signal ON. Apply 1000Hz signal from LEFT channel.		Connect AC VTVM and Oscilloscope to Right channel SPEAKER Terminals.	Adjust VR101 for minimum output.
	Same as above for RIGHT channel.		Connect AC VTVM and Oscilloscope to Left channel SPEAKER Terminals.	

Use a screwdriver with plastic grip for all adjustments.

CABINET & CHASSIS EXPLODED VIEW



CABINET & CHASSIS PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKAGE			
	620 000 0024	Bag Polyethylene	1
	620 187 9155	Box Corrugate Exp.	1
	620 057 7717	Bag Polyethylene-Exp.	1
	620 059 5087	Pad PL A	1
	620 059 5155	Pad PL B	1
	620 059 5384	Pad Right	1
	620 059 5391	Pad Left	1
	620 059 5728	Pad PL C	1
	620 059 5735	Pad PL Arm	1
	620 059 6596	Patching Sheet	1
	620 061 2548	Notes	1
	620 148 8012	Sheet Polyethylene	1
ACCESSORIES			
	620 038 1673	FM Antenna Assy	1
	620 057 8783	Bag Fan	1
	620 062 0543	Serial No. Sheet	1
	620 152 2624	Certificate Card	1
	620 187 7649	Explanatory Booklet	1
CABINET			
	620 125 8424	Wire Band	18
	403 020 8108	CERAMIC 3P C 50V [C100]	1
1	620 189 6817	Panel Control Assy	1
	620 043 0159	Panel Control Cassette	1
	620 043 0203	Panel Control Power	1
	620 189 6824	Panel Control	1
	620 043 2504	Decorate Plate Dial	1
	620 104 5239	Reflector	2
	620 111 5802	Knob Cap	1
2	620 033 7434	Hinge Assy	2
3	620 038 7774	Cabinet Left	1
4	620 038 7781	Cabinet Right	1
5	620 038 8061	Cabinet Top	1
6	620 187 7168	Rear Cover	1
7	620 039 7506	Plate Bottom	1
8	620 046 2037	Knob (Power)	1
10	620 046 6936	Knob (AM/FM/MODE)	3
11	620 046 7872	Knob (Station)	6
12	620 047 4436	Leg (Bottom-Rear)	2
13	620 048 4862	Metal Reinforce Left	1
14	620 048 4893	Metal Reinforce Right	1
15	620 051 4156	Screw	2
16	620 053 2952	Bushing (AC Cord)	1
17	620 053 6868	Shelter	1
18	620 072 9208	Lid Assy	1
19	620 083 1864	Gear Eject Assy	2
20	620 094 7893	Lid Cassette Right	1
21	620 094 7916	Lid Cassette Left	1
22	620 111 1736	Knob Stop 1	1
23	620 111 1750	Knob Stop 2	1
24	620 111 1774	Knob Pause	2
25	620 111 1798	Knob Record	1
26	620 111 1811	Knob FF	2
27	620 111 1835	Knob REW	2
28	620 111 1859	Knob Play	2
29	620 111 1897	Knob Push	4
30	620 111 4416	Knob Function	4
31	620 115 4221	Bracket Botton	1
32	620 115 4252	Bracket Button (Left)	1
33	620 115 4269	Bracket Button (Right)	1
34	620 117 6544	Metal Mount	1
35	620 122 7291	Screw	2
36	620 129 3432	Spindle Botton	1
37	620 139 1176	Spring (Right)	1
38	620 139 1183	Spring (Left)	1
39	620 187 7175	Metal Mount Socket	1
45	620 017 0888	Socket 1P (FM Antenna)	1
46 ⚠	620 023 7550	Power Cord	1
47 ⚠	620 187 7045	Power Trans	1
48	620 187 7229	Amplifier P.C.B. Assy	1
49	620 080 7371	Graphic EQ. P.C.B. Assy	1
50	620 187 7236	Micom P.C.B. Assy	1
51	620 080 7395	Function P.C.B. Assy	1
52	620 080 7401	Dubbing Switch P.C.B. Assy	1
53	620 080 7418	Indicator P.C.B. Assy	1
54	620 080 7425	Band Switch P.C.B. Assy	1
55	620 080 7432	Memory Switch P.C.B. Assy	1
56	620 080 7449	Beat Switch P.C.B. Assy	1
57	620 080 7456	Lamp P.C.B. Assy	1
58	620 080 7463	AUX P.C.B. Assy	1
59	620 080 7487	Jack P.C.B. Assy	1
60	620 080 7494	Loop Antenna Terminal P.C.B. Assy	1
61	620 187 5126	Fuse P.C.B. Assy	1
62	620 187 5140	AC In P.C.B. Assy	1
63	620 187 7243	Power Switch P.C.B. Assy	1
64	620 187 7250	Transistor 12V P.C.B. Assy	1
65	620 187 7267	Transistor 11V P.C.B. Assy	1
66	620 080 7470	Speaker P.C.B. Assy	1
71	411 020 5508	SCR S-TPG BRZ 2.6X6	1
72	411 020 5706	SCR S-TPG BRZ 2.6X8	24
73	411 020 5904	SCR S-TPG BRZ 3X10	21
74	411 020 7007	SCR S-TPG BRZ 3X20	4
75	411 020 7304	SCR S-TPG BRZ 3X30	1
76	411 020 7700	SCR S-TPG BRZ 3X6	2
77	411 020 8004	SCR S-TPG BRZ 3X8	17
78	411 021 3701	SCR S-TPG BIN 3X10	4
79	411 100 0508	SCR S-TPG BIN 4X14	4
80	411 030 7202	SCR BIN 2X6	2
82	411 002 8503	SCR PAN 3X6	2
83	411 041 9004	SCR PAN 3X6	2
85	411 092 7202	WASHER Z 3.2X12X0.8	4
86	411 093 9700	WASHER Z 4.5X12X1	4

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

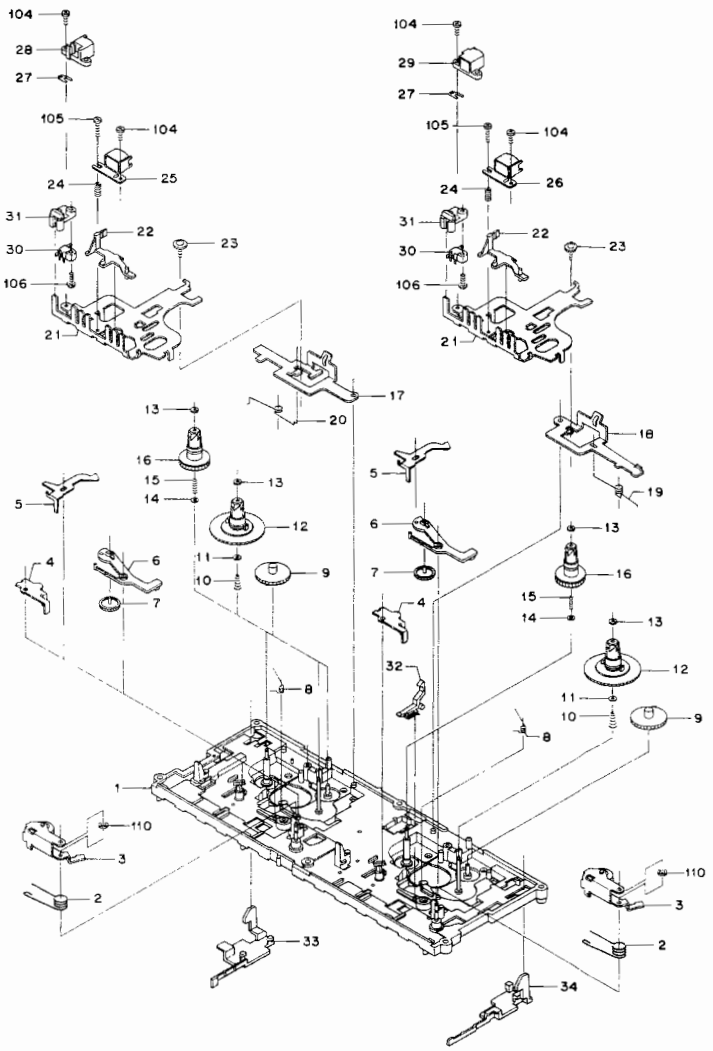
PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

MECHANISM PARTS LIST & EXPLODED VIEW

Ref. No.	Part No.	Description	Q'ty
MECHANISM			
	620 024 1687	Wire 3 Parallel	1
	620 125 8103	Lug	1
	620 125 8110	Lug	1
	403 042 3600	ELECT 100U M 16V [C1]	1
1	620 081 5567	Chassis Assy	1
2	620 137 8160	Spring Pinchroller	2
3	620 082 9885	Pinchroller Assy	2
4	620 131 8708	Lever Cue Review	2
5	620 131 8692	Lever ASO	2
6	620 132 4662	Arm Take-up	2
7	620 127 7647	Gear Take-up	2
8	620 137 8382	Spring Take-up	2
9	620 127 7678	Gear F FWD	2
10	620 139 3866	Spring Reel	2
11	620 125 3948	Washer	4
12	620 082 8741	Fix Take-up Assy	2
13	620 125 1630	Washer	4
14	620 125 3054	Washer	2
15	620 139 3880	Spring Supply	2
16	620 126 6009	Fix Supply Reel	2
17	620 131 8647	Lever Cassette Fix Left	1
18	620 131 8654	Lever Cassette Fix Right	1
19	620 137 8191	Spring Cassette Lock Right	1
20	620 137 8207	Spring Cassette Lock Left	1
21	620 130 5364	Base Slide	2
22	620 131 8517	Lever Sensor ASO	2
23	620 122 6324	Screw Washer	2
24	620 139 3835	Spring Head	2
25	620 023 5082	Play Head	1
26	620 023 5075	R/P Head	1
27	620 119 3718	Spacer Head	2
28	620 136 0608	Guide Tape	1
29	620 023 5112	Erase Head	1
or	620 023 5129	Erase Head	1
30	620 016 8922	Detector Switch 1P1T	2
31	620 130 6347	Plate Switch	2
32	620 136 3852	Interlock Lever	1
33	620 130 5203	Plate Lock Lid Right	1
34	620 130 5197	Plate Lock Lid Left	1
35	620 125 6512	E Ring	2
36	620 125 2163	Washer	2
37	620 125 3078	Washer	2
38	620 137 8801	Spring Arm Idler	2
39	620 139 2715	Spring Pulley	2
40	620 082 6785	Flywheel Complete	1
41	620 082 6853	Flywheel Complete	1
42	620 128 6342	Belt Drive P	1
43	620 128 6335	Belt Drive R/P	1
44	620 016 2630	Leaf Switch	2
45	620 083 2502	Idler Assy R/P	1
46	620 083 2519	Idler Assy P	1
47	620 128 6328	Belt Wind	2
48	620 136 5344	Lever R/P Switch	1
49	620 139 0209	Spring	1
50	620 122 9356	Screw	2
51	620 123 9942	Cushion Motor	2
52	620 124 5530	Cushion	2
53	620 030 4023	Motor	1
54	620 136 6082	Spring Rewind Roller	1
55	620 121 6011	Bracket Motor	1
56	620 137 8825	Spring Lever Cancel	1
57	620 131 9071	Lever Cancel Pause	1
58	620 122 9264	Screw	2
59	620 119 7211	Spacer	1
60	620 131 9088	Lever Link	1
61	620 125 6093	Plain Washer	1
62	620 117 1020	Metal Mount Record	1
63	620 136 4514	Lever Record	1
65	620 130 5326	Plate Switch Motor Left	1
66	620 130 5333	Plate Switch Motor Right	1
67	620 130 5340	Plate Lock	2
68	620 131 8616	Lutch Pause	1
69	620 131 9064	Lutch Pause	1
70	620 137 8177	Spring Pause Latch	2
71	620 122 7277	Screw Washer	2
72	620 131 8630	Lever Stopper Record	1
73	620 137 8795	Spring Stopper Record	1

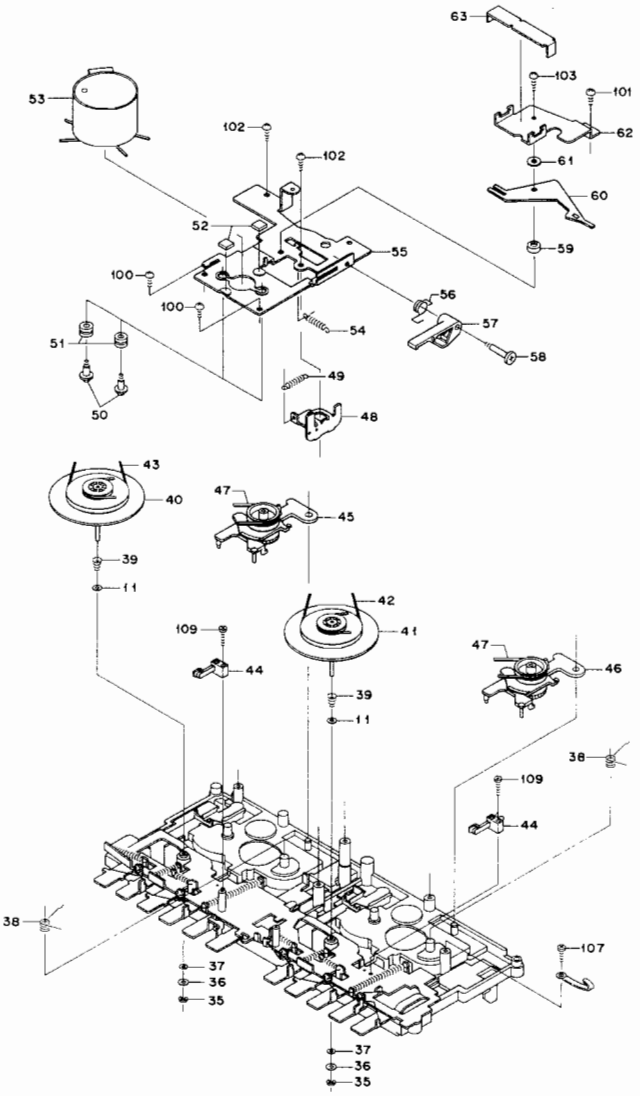
(Chassis Top)



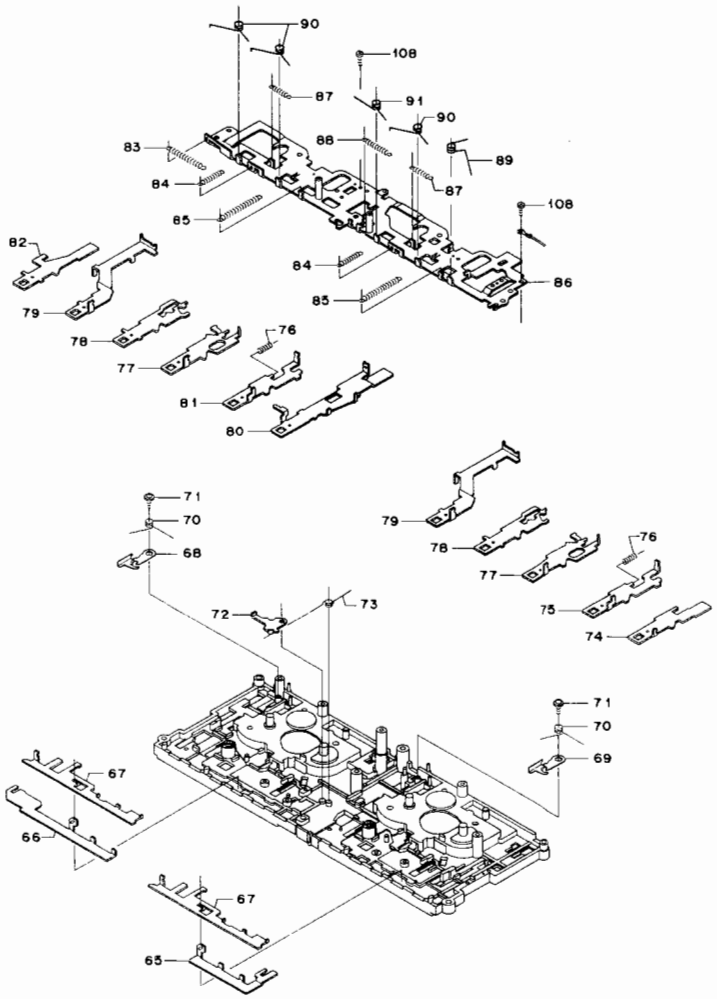
Ref. No.	Part No.	Description	Q'ty
74	620 130 5302	Rod Stop Eject Left	1
75	620 130 5265	Rod Play	1
76	620 139 3774	Spring Base Slide	2
77	620 130 5258	Rod Rewind	2
78	620 130 5241	Rod F.FWD	2
79	620 130 5234	Rod Pause	2
80	620 130 5272	Rod Record	1
81	620 130 6378	Rod Play	1
82	620 130 5227	Rod Stop Eject Right	1
83	620 136 8888	Spring Lever Head	1
84	620 139 0643	Spring Lever Auto Shut-off	2
85	620 139 1039	Spring Rod Base	2
86	620 082 1346	Bracket Rod Assy	1
87	620 139 0919	Spring Plate Motor	2
88	620 136 6235	Spring Shut-off Lever	1
89	620 137 8221	Spring Rod Stop	1
90	620 137 8146	Spring Rod	3
91	620 137 8139	Spring Rod Pause	1

MECHANISM PARTS LIST & EXPLODED VIEW (Continued)

(Chassis Bottom 1)



(Chassis Bottom 2)



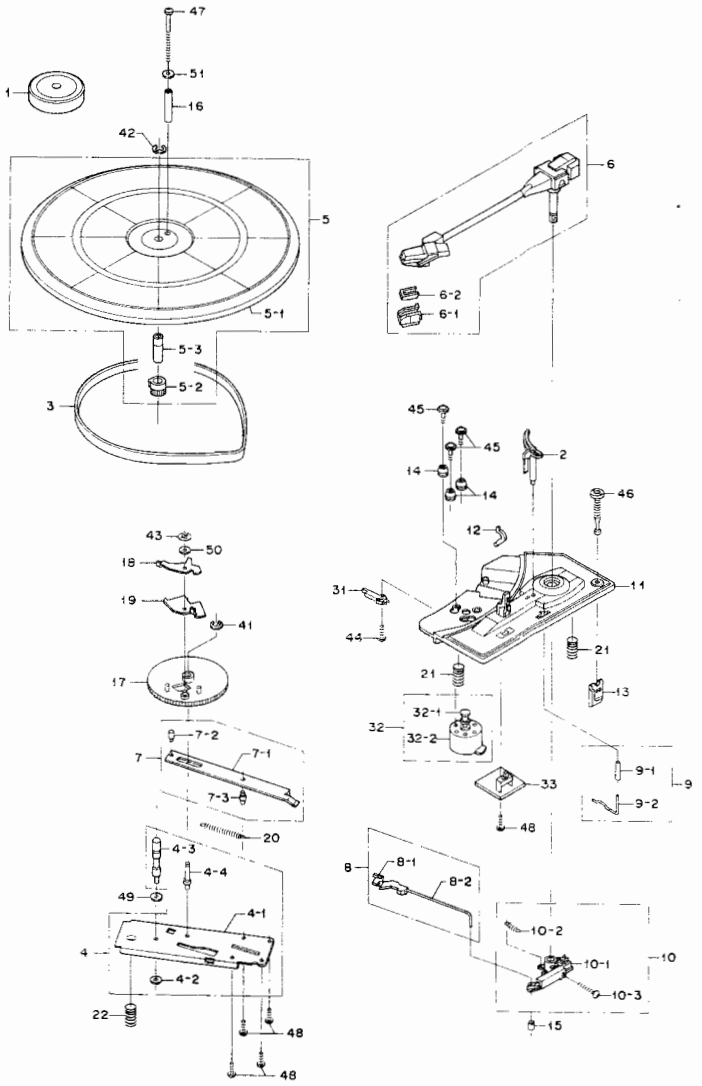
Ref. No.	Part No.	Description	Q'ty
100	411 002 6004	SCR PAN 2.6X6	2
101	411 040 3607	SCR PAN 2.6X6	1
102	411 023 3303	SCR S-TPG PAN 2.6X8	2
103	411 040 4604	SCR PAN 2.6X8	1
104	411 030 6403	SCR BIN 2X5	4
105	411 030 7509	SCR BIN 2X7	2
106	411 100 0805	SCR S-TPG PAN 2X7	2
107	411 021 3107	SCR S-TPG BIN 2.6X8	2
108	411 021 0809	SCR S-TPG BIN 2X6	2
109	411 021 0205	SCR S-TPG BIN 2X12	2
110	411 015 9009	RING E 2	2

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

RECORD PLAYER PARTS LIST & EXPLODED VIEW

Ref. No.	Part No.	Description	Q'ty
TURNTABLE			
	620 002 0909	Player (Shnbn HT763)	1
1	620 183 1719	EP Adaptor	1
2	620 183 1733	Arm Elevation	1
3	620 183 1740	Belt Rubber	1
4	620 183 4802	Main Chassis Assy	1
4-1	620 184 0285	Chassis Main	1
4-2	620 184 1855	Plate Center	1
4-3	620 184 2449	Shaft Center	1
4-4	620 184 2456	Shaft Ring Gear	1
5	620 183 4932	Platter Assy	1
5-1	620 184 1527	Platter	1
5-2	620 184 1558	Gear-T.T	1
5-3	620 184 1848	Insert-Platter	1
6	620 183 5014	Tone Arm Assy	1
6-1	620 183 1689	Cartridge	1
6-2	620 182 6432	Stylus	1
7	620 183 5052	OP Plate Assy	1
7-1	620 184 2036	Plate OP	1
7-2	620 184 2562	Pin G.S	1
7-3	620 184 2579	Post OP Spring	1
8	620 183 5069	Actuator Assy	1
8-1	620 184 2043	Holder Actuator	1
8-2	620 184 2296	Actuator	1
9	620 183 5076	Lifter Knob Assy	1
9-1	620 183 8770	Knob Lifter	1
9-2	620 184 2333	Lifter Handle	1
10	620 183 5113	Feed Arm Assy	1
10-1	620 184 2401	Arm Feed	1
10-2	620 184 2890	Spring Feed Arm	1
10-3	411 109 1001	SCR TPG PAN 3X15	1
11	620 183 5823	Cabinet	1
12	620 184 0094	Locker Arm Pipe	1
13	620 184 0100	Clamper	1
14	620 184 1237	Cushion Motor	3
15	620 184 1244	Stopper Actuator	1
16	620 184 1428	Supporter Platter	1
17	620 184 1565	Gear Ring	1
18	620 184 2012	Clutch Plate	1
19	620 184 2029	Clutch Guide	1
20	620 184 2883	Spring OP Plate	1
21	620 184 2937	Spring Foot (A)	2
22	620 184 2944	Spring Foot (B)	1
31	620 182 7767	Switch Leaf	1
32	620 183 0286	Motor Assy	1
32-1	620 184 1923	Pulley Motor	1
32-2	620 183 0293	Motor	1
33	620 183 4116	Phono P.C.B. Assy	1
41	411 000 9908	RING E 3	1
42	411 016 5208	RING E 6	1
43	412 026 6902	SPECIAL WASHER	1
44	411 109 1100	SCR PAN PCS 2X12	1
45	412 026 7107	SPECIAL SCREW	3
46	412 026 7008	SPECIAL SCREW	1
47	412 026 7206	SPECIAL SCREW	1
48	411 079 2008	SCR TPG PAN 3X18	5
49	412 026 6803	SPECIAL WASHER	1
50	411 109 1209	WASHER Z 3.2X8X0.35	1
51	411 092 8704	WASHER Z 3.2X8X0.5	1



NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

DOUBLE CASSETTE DECK ELECTRICAL ADJUSTMENT

MEASURING INSTRUMENTS REQUIRED

- Dualtrace Oscilloscope
- VTVM (AC voltmeter with high impedance)
- Frequency Counter
- Test Tapes
  - ‡ 10kHz Test Tape (Example: TEAC MTT-215C) for Head Azimuth Adjustment
  - ‡ 3kHz Test Tape (Example: TEAC MTT-111N) for Tape Speed Adjustment

HEAD AZIMUTH ADJUSTMENT

1. Connect the dualtrace oscilloscope and VTVM to the Test Point TP5 (Left CH.) and TP6 (Right CH.).

Then, set the dualtrace oscilloscope as follows:

- ‡ MODE ..... CHOP (chopped)
- ‡ SOURCE ..... INT (internal), CH1 or CH2
- ‡ SWEEP MODE ..... AUTO (automatic)

NOTE:
Adjust the field on the oscilloscope with the VOLT. ADJ. and TIME ADJ.

2. Load DECK 1 with a test tape (Example: TEAC MTT-215C) and set it in the forward playback mode.
3. Adjust the azimuth adjustment screw, so that the wave forms become maximum on the oscilloscope and the Right channel wave form overlaps with the Left channel one.
4. Perform the same adjustment for DECK 2.

TAPE SPEED ADJUSTMENT

Normal Speed Adjustment

1. Connect the frequency counter to the test point TP6 (Right channel).
2. Set the Dubbing switch and High Speed switch to the OFF position.
3. Load DECK 2 with a test tape (Exampel: TEAC MTT-111N) and set it in the playback mode.
4. Adjust the potentiometer VR301, so that the output frequency becomes 3000Hz ± 10Hz.

High Speed Adjustment

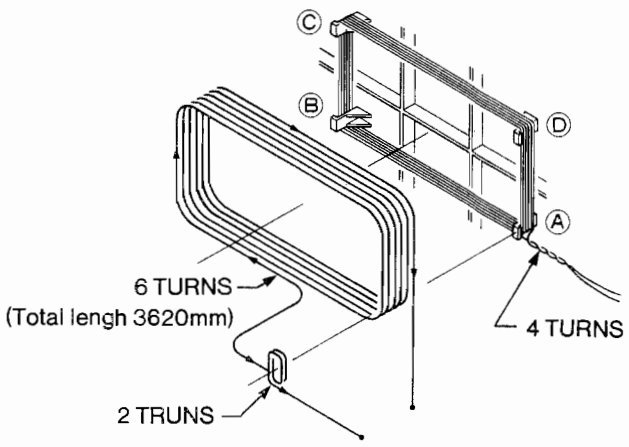
5. Change the Dubbing switch and High Speed switch to ON position.
6. Check frequency counter for a reading of 5190Hz ± 520Hz.

   If it's not, change R368 (6.2kΩ 1/6W).

AM ANTENNA COIL STRINGING

REPLACEMENT OF AM ANTENNA COIL

1. Wind twice the enamel lead counterclockwise on to the boss A right inside of the cabinet as illustrated.
2. Wind six times the enamel lead clockwise in alphabetical order (A → B → C → D) without slackening as illustrated.
3. Twist four times the beginning and terminal of leads together to make string as illustrated.
4. Shave 15mm in length of the enamel surface of both leads end expose the copper part.
5. Wind the antenna coil lead on to the AM antenna terminal of the Loop Antenna Terminal P.C.Board and solder it.



P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty
AMPLIFIER P.C.B. ASSY			
48	620 187 7229	Amplifier P.C.B. Assy	1
	620 052 9228	Cover Shield	1
PC102	620 024 2684	Wire 2 Parallel	1
PC206	620 055 4121	Jumper	1
PC207	620 017 8716	Connector 5P Assy	1
PC302	620 055 4312	Jumper	1
PC401	620 190 1719	Jumper	1
PC402	620 055 2875	Jumper	1
PC403	620 055 2769	Jumper	1
PC404	620 024 2127	Wire 3 Parallel	1
PC501	620 024 2646	Wire 3 Parallel	1
W201	620 020 5887	Connector 1P Assy	1
W404	620 017 8600	Connector 1P Assy	1
CF101	620 014 6043	Ceramic Filter 10.7MHz	1
CF102	620 026 6741	Mechanical Filter	1
ICP1	620 017 0697	Protector, ICP-N15	1
L101	620 187 7151	ANT Coil FM 1ST75OHM	1
L102	620 029 2177	ANT Coil FM 2nd	1
L103	620 029 2146	RF Coil FM 1st	1
L104	620 029 2153	RF Coil FM 2nd	1
L105	620 028 9443	OSC Coil FM	1
L106	620 027 7334	IFT FM DET	1
L107	620 027 7419	IFT AM 450kHz	1
L108	620 028 2895	ANT Coil MW	1
L109	620 183 0163	OSC Coil MW	1
or	620 028 9436	OSC Coil MW	1
L110	620 027 7341	IFT FM 10.7MHz	1
L301	620 026 4440	Bias Trap	1
L302	620 026 4440	Bias Trap	1
L303	620 026 6277	Micro Inductor	1
L304	620 026 5522	Choke Coil 470μH	1
S301	620 015 3386	Slide Switch 4P2T	1
TC101	620 007 0874	Trimmer 5pF	1
TC102	620 007 0874	Trimmer 5pF	1
TC103	620 007 0867	Trimmer 1pPF	1
VR101	620 006 3326	Potentiometer (B-10kΩ)	1
VR301	620 006 3333	Potentiometer (B-2.2kΩ)	1

If necessary, replace both Diode D101, D103, D104 (SVC211) and Diode D105, D106 (SVC 321) together with new ones which have the equivalent characteristics.

D101	407 000 3503	VARACTOR DI SVC211SP	1
D102	407 077 0504	DIODE 1SS133-K	1
D103	407 000 3503	VARACTOR DI SVC211SP	1
D104	407 000 3503	VARACTOR DI SVC211SP	1
D105	407 000 4708	VARACTOR DI SVC321C-2	1
or	407 000 4807	VARACTOR DI SVC321D-2	1
D106	407 000 4708	VARACTOR DI SVC321C-2	1
or	407 000 4807	VARACTOR DI SVC321D-2	1
D107	407 077 0504	DIODE 1SS133-K	1
D108	407 077 0504	DIODE 1SS133-K	1
D201	407 101 7806	DIODE DS4003	1
D202	407 101 7806	DIODE DS4003	1
D203	407 101 7806	DIODE DS4003	1
D204	407 101 7806	DIODE DS4003	1
D205	407 049 6206	ZENER DIODE GZA12X	1
D208	407 077 0504	DIODE 1SS133-K	1
D209	407 077 0504	DIODE 1SS133-K	1
D210	407 050 5502	ZENER DIODE GZA5.6Y	1
D211	407 049 6008	ZENER DIODE GZA11Y	1
D301	407 077 0504	DIODE 1SS133-K	1
D302	407 077 0504	DIODE 1SS133-K	1
D303	407 077 0504	DIODE 1SS133-K	1
D304	407 077 0504	DIODE 1SS133-K	1
D305	407 077 0504	DIODE 1SS133-K	1
D701	407 077 0504	DIODE 1SS133-K	1
D702	407 049 9108	ZENER DIODE GZA2.7X	1
IC101	409 049 2103	IC TA7358P	1
IC102	409 112 5901	IC LA1810	1
IC201	409 017 7208	IC LA4261	1
IC301	409 121 8702	IC LA3246	1
IC302	409 068 4409	IC BA715	1
Q101	405 016 0806	TR 2SC2839-E	1
Q102	405 016 0806	TR 2SC2839-E	1
Q103	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1

Ref. No.	Part No.	Description	Q'ty
Q104	405 016 0806	TR 2SC2839-E	1
Q105	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q106	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q107	405 004 5202	TR 2SA608-G-SP	1
or	405 004 4700	TR 2SA608-F-SP	1
Q108	405 004 5202	TR 2SA608-G-SP	1
or	405 004 4700	TR 2SA608-F-SP	1
Q109	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q110	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q201	405 017 9808	TR 2SC3330-V	1
Q202	405 017 9808	TR 2SC3330-V	1
Q207	405 017 9709	TR 2SC3330-U	1
or	405 017 9600	TR 2SC3330-T	1
Q208	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q209	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q210	405 004 5202	TR 2SA608-G-SP	1
or	405 004 4700	TR 2SA608-F-SP	1
Q301	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q302	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q303	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q304	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q305	405 004 5202	TR 2SA608-G-SP	1
or	405 004 4700	TR 2SA608-F-SP	1
Q306	405 019 4009	TR 2SC536-G-SP	1
or	405 019 2906	TR 2SC536-F-SP	1
Q307	405 024 9907	TR 2SD734-F	1
Q308	405 017 9709	TR 2SC3330-U	1
or	405 017 9600	TR 2SC3330-T	1
Q309	405 008 2504	TR 2SB698-G	1
or	405 008 2405	TR 2SB698-F	1
Q310	405 017 9808	TR 2SC3330-V	1
or	405 017 9709	TR 2SC3330-U	1
Q311	405 017 9709	TR 2SC3330-U	1
or	405 017 9600	TR 2SC3330-T	1
Q312	405 017 9709	TR 2SC3330-U	1
or	405 017 9600	TR 2SC3330-T	1
Q313	405 004 5202	TR 2SA608-G-SP	1
or	405 004 4700	TR 2SA608-F-SP	1
Q701	405 004 5202	TR 2SA608-G-SP	1
or	405 004 4700	TR 2SA608-F-SP	1
C101	403 001 1906	CERAMIC 0.01U M 16V	1
C102	403 069 1207	CERAMIC 1000P K 50V	1
C103	403 025 7601	CERAMIC 4.7P K 50V	1
C104	403 025 7601	CERAMIC 4.7P K 50V	1
C105	403 012 4002	CERAMIC 15P J 50V	1
C106	403 020 8009	CERAMIC 3P C 50V	1
C107	403 001 1906	CERAMIC 0.01U M 16V	1
C108	403 001 1906	CERAMIC 0.01U M 16V	1
C109	403 074 2701	CERAMIC 0.047U Z 50V	1
C110	403 016 2004	CERAMIC 2.2P K 50V	1
C112	403 038 2402	ELECT 100U M 6.3V	1
C113	403 069 8404	CERAMIC 0.01U Z 50V	1
C114	403 001 1906	CERAMIC 0.01U M 16V	1
C115	403 038 2402	ELECT 100U M 6.3V	1
C116	403 001 8301	CERAMIC 0.047U Z 16V	1
C117	403 088 4104	STYRENE 430P J 50V	1
C118	403 014 6202	CERAMIC 18P K 50V	1
C119	403 001 8301	CERAMIC 0.047U Z 16V	1
C120	403 042 0302	ELECT 10U M 16V	1
C121	403 001 8301	CERAMIC 0.047U Z 16V	1
C122	403 040 2704	ELECT 22U M 10V	1
C123	403 001 1906	CERAMIC 0.01U M 16V	1
C124	403 021 7308	CERAMIC 3.3P K 50V	1
C125	403 057 0601	POLYESTER 0.01U K 50V	1
C126	403 057 0601	POLYESTER 0.01U K 50V	1
C127	403 049 1609	ELECT 1U M 50V	1
C128	403 049 1609	ELECT 1U M 50V	1
C129	403 048 3109	ELECT 0.22U M 50V	1
C130	403 001 1906	CERAMIC 0.01U M 16V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description				Q'ty
C131	403 087 2804	STYRENE	1000P	K	50V	1
C132	403 050 1209	ELECT	2.2U	M	50V	1
C133	403 050 7706	ELECT	3.3U	M	50V	1
C134	403 072 8200	CERAMIC	330P	K	50V	1
C135	403 058 3403	POLYESTER	0.015U	K	50V	1
C136	403 004 9503	CERAMIC	2200P	K	50V	1
C137	403 025 7304	CERAMIC	4.7P	K	50V	1
C138	403 001 1906	CERAMIC	0.01U	M	16V	1
C139	403 038 2402	ELECT	100U	M	6.3V	1
C140	403 001 8301	CERAMIC	0.047U	Z	16V	1
C141	403 049 1609	ELECT	1U	M	50V	1
C142	403 042 3600	ELECT	100U	M	16V	1
C144	403 038 2402	ELECT	100U	M	6.3V	1
C146	403 015 1602	CERAMIC	2P	C	50V	1
C147	403 002 2902	CERAMIC	0.01U	M	25V	1
C201	403 049 1609	ELECT	1U	M	50V	1
C202	403 049 1609	ELECT	1U	M	50V	1
C203	403 009 8105	CERAMIC	100P	K	50V	1
C204	403 009 8105	CERAMIC	100P	K	50V	1
C205	403 049 1609	ELECT	1U	M	50V	1
C206	403 049 1609	ELECT	1U	M	50V	1
C207	403 042 3600	ELECT	100U	M	16V	1
C211	403 047 1502	ELECT	4.7U	M	25V	1
C212	403 047 1502	ELECT	4.7U	M	25V	1
C213	403 072 8200	CERAMIC	330P	K	50V	1
C214	403 072 8200	CERAMIC	330P	K	50V	1
C215	403 038 2402	ELECT	100U	M	6.3V	1
C216	403 038 2402	ELECT	100U	M	6.3V	1
C217	403 045 0606	ELECT	100U	M	25V	1
C218	403 047 1502	ELECT	4.7U	M	25V	1
C219	403 057 2100	POLYESTER	0.1U	J	50V	1
C220	403 057 2100	POLYESTER	0.1U	J	50V	1
C221	403 042 6205	ELECT	1000U	M	16V	1
C222	403 042 6205	ELECT	1000U	M	16V	1
C223	403 069 8404	CERAMIC	0.01U	Z	50V	1
C224	403 069 8404	CERAMIC	0.01U	Z	50V	1
C225	403 069 8404	CERAMIC	0.01U	Z	50V	1
C226	403 069 8404	CERAMIC	0.01U	Z	50V	1
C227	403 046 0605	ELECT	2200U	M	25V	1
C228	403 043 1100	ELECT	220U	M	16V	1
C229	403 042 0302	ELECT	10U	M	16V	1
C230	403 038 7209	ELECT	220U	M	6.3V	1
C232	403 042 3600	ELECT	100U	M	16V	1
C233	403 042 3600	ELECT	100U	M	16V	1
C301	403 074 9205	CERAMIC	680P	K	50V	1
C302	403 074 9205	CERAMIC	680P	K	50V	1
C303	403 074 6303	CERAMIC	560P	K	50V	1
C304	403 074 6303	CERAMIC	560P	K	50V	1
C305	403 040 8508	ELECT	33U	M	10V	1
C306	403 040 8508	ELECT	33U	M	10V	1
C307	403 068 9402	CERAMIC	100P	K	50V	1
C308	403 068 9402	CERAMIC	100P	K	50V	1
C309	403 057 0601	POLYESTER	0.01U	K	50V	1
C310	403 057 0601	POLYESTER	0.01U	K	50V	1
C311	403 047 1502	ELECT	4.7U	M	25V	1
C312	403 047 1502	ELECT	4.7U	M	25V	1
C313	403 059 0104	POLYESTER	0.018U	K	50V	1
C314	403 059 0104	POLYESTER	0.018U	K	50V	1
C315	403 047 1502	ELECT	4.7U	M	25V	1
C316	403 047 1502	ELECT	4.7U	M	25V	1
C317	403 072 8200	CERAMIC	330P	K	50V	1
C318	403 072 8200	CERAMIC	330P	K	50V	1
C319	403 047 1502	ELECT	4.7U	M	25V	1
C320	403 042 3600	ELECT	100U	M	16V	1
C321	403 042 3600	ELECT	100U	M	16V	1
C323	403 049 1609	ELECT	1U	M	50V	1
C324	403 049 1609	ELECT	1U	M	50V	1
C325	403 009 8105	CERAMIC	100P	K	50V	1
C326	403 009 8105	CERAMIC	100P	K	50V	1
C327	403 009 8105	CERAMIC	100P	K	50V	1
C328	403 009 8105	CERAMIC	100P	K	50V	1
C329	403 024 5103	CERAMIC	39P	K	50V	1
C330	403 024 5103	CERAMIC	39P	K	50V	1
C331	403 050 7706	ELECT	3.3U	M	50V	1
C332	403 050 7706	ELECT	3.3U	M	50V	1
C333	403 058 3403	POLYESTER	0.015U	K	50V	1
C334	403 058 3403	POLYESTER	0.015U	K	50V	1
C335	403 049 1609	ELECT	1U	M	50V	1
C336	403 049 1609	ELECT	1U	M	50V	1

Ref. No.	Part No.	Description				Q'ty
C337	403 029 0509	CERAMIC	560P	K	50V	1
C338	403 029 0509	CERAMIC	560P	K	50V	1
C339	403 033 9406	CERAMIC	820P	K	50V	1
C340	403 033 9406	CERAMIC	820P	K	50V	1
C341	403 018 8509	CERAMIC	220P	K	50V	1
C342	403 018 8509	CERAMIC	220P	K	50V	1
C343	403 042 3600	ELECT	100U	M	16V	1
C344	403 001 1906	CERAMIC	0.01U	M	16V	1
C345	403 072 8200	CERAMIC	330P	K	50V	1
C346	403 057 0601	POLYESTER	0.01U	K	50V	1
C347	403 060 0704	POLYESTER	2700P	K	50V	1
C348	403 060 2500	POLYESTER	0.027U	K	50V	1
C349	403 074 6303	CERAMIC	560P	K	50V	1
C350	403 069 1207	CERAMIC	1000P	K	50V	1
C351	403 001 1906	CERAMIC	0.01U	M	16V	1
C352	403 049 1609	ELECT	1U	M	50V	1
C353	403 049 1609	ELECT	1U	M	50V	1
C354	403 050 1209	ELECT	2.2U	M	50V	1
R101	401 024 7707	CARBON	100K	JA	1/6W	1
R102	401 025 7102	CARBON	22	JA	1/6W	1
R103	401 024 7707	CARBON	100K	JA	1/6W	1
R104	401 024 7400	CARBON	10K	JA	1/6W	1
R105	401 025 7102	CARBON	22	JA	1/6W	1
R106	401 027 0309	CARBON	47K	JA	1/6W	1
R107	401 026 4605	CARBON	33K	JA	1/6W	1
R108	401 025 7102	CARBON	22	JA	1/6W	1
R109	401 026 9600	CARBON	470	JA	1/6W	1
R110	401 026 9303	CARBON	47	JA	1/6W	1
R112	401 027 2600	CARBON	5.6K	JA	1/6W	1
R113	401 026 6609	CARBON	390	JA	1/6W	1
R114	401 027 0507	CARBON	470K	JA	1/6W	1
R115	401 026 6609	CARBON	390	JA	1/6W	1
R116	401 024 7707	CARBON	100K	JA	1/6W	1
R117	401 024 7707	CARBON	100K	JA	1/6W	1
R118	401 025 7805	CARBON	2.2K	JA	1/6W	1
R119	401 024 7004	CARBON	1K	JA	1/6W	1
R120	401 025 7409	CARBON	220	JA	1/6W	1
R121	401 024 6700	CARBON	100	JA	1/6W	1
R122	401 024 7004	CARBON	1K	JA	1/6W	1
R125	401 026 9907	CARBON	4.7K	JA	1/6W	1
R126	401 019 9600	CARBON	47	JA	1/4W	1
R127	401 024 7004	CARBON	1K	JA	1/6W	1
R128	401 024 7004	CARBON	1K	JA	1/6W	1
R129	401 024 7400	CARBON	10K	JA	1/6W	1
R130	401 024 7400	CARBON	10K	JA	1/6W	1
R131	401 024 7400	CARBON	10K	JA	1/6W	1
R132	401 024 7400	CARBON	10K	JA	1/6W	1
R133	401 025 7805	CARBON	2.2K	JA	1/6W	1
R134	401 026 0003	CARBON	24K	JA	1/6W	1
R135	401 024 7707	CARBON	100K	JA	1/6W	1
R136	401 027 0309	CARBON	47K	JA	1/6W	1
R137	401 025 8208	CARBON	22K	JA	1/6W	1
R138	401 026 1000	CARBON	2.7K	JA	1/6W	1
R139	401 025 7102	CARBON	22	JA	1/6W	1
R140	401 024 7004	CARBON	1K	JA	1/6W	1
R141	401 025 2305	CARBON	150K	JA	1/6W	1
R142	401 024 7707	CARBON	100K	JA	1/6W	1
R143	401 025 7409	CARBON	220	JA	1/6W	1
R144	401 024 7707	CARBON	100K	JA	1/6W	1
R145	401 024 6700	CARBON	100	JA	1/6W	1
R146	401 025 2305	CARBON	150K	JA	1/6W	1
R147	401 027 0309	CARBON	47K	JA	1/6W	1
R148	401 026 4308	CARBON	3.3K	JA	1/6W	1
R149	401 024 7707	CARBON	100K	JA	1/6W	1
R150	401 024 7004	CARBON	1K	JA	1/6W	1
R151	401 024 7004	CARBON	1K	JA	1/6W	1
R152	401 024 7400	CARBON	10K	JA	1/6W	1
R153	401 026 4308	CARBON	3.3K	JA	1/6W	1
R154	401 024 7004	CARBON	1K	JA	1/6W	1
R155	401 024 7400	CARBON	10K	JA	1/6W	1
R156	401 024 7400	CARBON	10K	JA	1/6W	1
R157	401 027 5908	CARBON	68K	JA	1/6W	1
R159	401 025 1605	CARBON	1.5K	JA	1/6W	1
R161	401 024 6700	CARBON	100	JA	1/6W	1
R201	401 027 9302	CARBON	820K	JA	1/6W	1
R202	401 027 9302	CARBON	820K	JA	1/6W	1
R203	401 025 8703	CARBON	220K	JA	1/6W	1
R204	401 025 8703	CARBON	220K	JA	1/6W	1
R205	401 025 8703	CARBON	220K	JA	1/6W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description			Q'ty
R206	401 025 8703	CARBON	220K	JA 1/6W	1
R207	401 026 9907	CARBON	4.7K	JA 1/6W	1
R208	401 026 9907	CARBON	4.7K	JA 1/6W	1
R209	401 024 7004	CARBON	1K	JA 1/6W	1
R210	401 024 7004	CARBON	1K	JA 1/6W	1
R211	401 016 2604	CARBON	220	JA 1/4W	1
R212	401 025 7409	CARBON	220	JA 1/6W	1
R217	401 026 4308	CARBON	3.3K	JA 1/6W	1
R218	401 026 4308	CARBON	3.3K	JA 1/6W	1
R219	401 024 7400	CARBON	10K	JA 1/6W	1
R220	401 024 7400	CARBON	10K	JA 1/6W	1
R221	401 026 2106	CARBON	3.3	JA 1/6W	1
R222	401 026 2106	CARBON	3.3	JA 1/6W	1
R224	401 026 9600	CARBON	470	JA 1/6W	1
R227	401 025 8703	CARBON	220K	JA 1/6W	1
R228	401 027 5205	CARBON	680	JA 1/6W	1
R229	401 025 8208	CARBON	22K	JA 1/6W	1
R230	401 012 7009	CARBON	10K	JA 1/4W	1
R231	401 021 3009	CARBON	5.6K	JA 1/4W	1
R232	401 056 3401	OXIDE-MT	470	JB 1/2W	1
R233	402 015 2909	FUSIBLE RES	1	J- 1/4W	1
R301	401 024 9008	CARBON	120	JA 1/6W	1
R302	401 024 9008	CARBON	120	JA 1/6W	1
R303	401 025 8208	CARBON	22K	JA 1/6W	1
R304	401 025 8208	CARBON	22K	JA 1/6W	1
R305	401 025 0806	CARBON	13K	JA 1/6W	1
R306	401 025 0806	CARBON	13K	JA 1/6W	1
R307	401 025 7805	CARBON	2.2K	JA 1/6W	1
R308	401 025 7805	CARBON	2.2K	JA 1/6W	1
R309	401 024 7004	CARBON	1K	JA 1/6W	1
R310	401 024 7004	CARBON	1K	JA 1/6W	1
R311	401 024 7707	CARBON	100K	JA 1/6W	1
R312	401 024 7707	CARBON	100K	JA 1/6W	1
R313	401 026 4605	CARBON	33K	JA 1/6W	1
R314	401 026 4605	CARBON	33K	JA 1/6W	1
R315	401 024 7707	CARBON	100K	JA 1/6W	1
R316	401 018 4903	CARBON	33K	JA 1/4W	1
R317	401 012 5708	CARBON	1K	JA 1/4W	1
R318	401 012 5708	CARBON	1K	JA 1/4W	1
R319	401 025 8208	CARBON	22K	JA 1/6W	1
R320	401 025 8208	CARBON	22K	JA 1/6W	1
R321	401 012 4503	CARBON	100	JA 1/4W	1
R322	401 012 4503	CARBON	100	JA 1/4W	1
R323	401 026 7606	CARBON	390K	JA 1/6W	1
R324	401 026 7606	CARBON	390K	JA 1/6W	1
R325	401 026 4308	CARBON	3.3K	JA 1/6W	1
R326	401 026 4308	CARBON	3.3K	JA 1/6W	1
R327	401 027 0507	CARBON	470K	JA 1/6W	1
R328	401 027 0507	CARBON	470K	JA 1/6W	1
R329	401 026 7606	CARBON	390K	JA 1/6W	1
R330	401 026 7606	CARBON	390K	JA 1/6W	1
R331	401 025 7805	CARBON	2.2K	JA 1/6W	1
R332	401 025 7805	CARBON	2.2K	JA 1/6W	1
R333	401 027 5502	CARBON	6.8K	JA 1/6W	1
R334	401 027 5502	CARBON	6.8K	JA 1/6W	1
R335	401 027 5908	CARBON	68K	JA 1/6W	1
R336	401 027 5908	CARBON	68K	JA 1/6W	1
R337	401 024 7707	CARBON	100K	JA 1/6W	1
R338	401 024 7707	CARBON	100K	JA 1/6W	1
R339	401 024 6700	CARBON	100	JA 1/6W	1
R340	401 024 6700	CARBON	100	JA 1/6W	1
R341	401 024 7707	CARBON	100K	JA 1/6W	1
R342	401 024 7707	CARBON	100K	JA 1/6W	1
R343	401 026 4605	CARBON	33K	JA 1/6W	1
R344	401 026 4605	CARBON	33K	JA 1/6W	1
R345	401 024 7400	CARBON	10K	JA 1/6W	1
R346	401 012 7009	CARBON	10K	JA 1/4W	1
R347	401 025 8208	CARBON	22K	JA 1/6W	1
R348	401 025 8208	CARBON	22K	JA 1/6W	1
R349	401 027 0309	CARBON	47K	JA 1/6W	1
R350	401 024 7400	CARBON	10K	JA 1/6W	1
R351	401 089 8206	OXIDE-MT	18	JB 1/2W	1
R352	401 026 4308	CARBON	3.3K	JA 1/6W	1
R353	401 026 4308	CARBON	3.3K	JA 1/6W	1
R354	401 024 7400	CARBON	10K	JA 1/6W	1
R355	401 024 7400	CARBON	10K	JA 1/6W	1
R356	401 024 7707	CARBON	100K	JA 1/6W	1
R357	401 025 1605	CARBON	1.5K	JA 1/6W	1
R358	401 024 7400	CARBON	10K	JA 1/6W	1
R359	401 025 7805	CARBON	2.2K	JA 1/6W	1
R360	401 024 7707	CARBON	100K	JA 1/6W	1
R361	401 026 4308	CARBON	3.3K	JA 1/6W	1
R362	401 027 4307	CARBON	6.2K	JA 1/6W	1
R363	401 026 4308	CARBON	3.3K	JA 1/6W	1
R364	401 019 5800	CARBON	4.7	JA 1/4W	1
R365	401 026 4308	CARBON	3.3K	JA 1/6W	1
R366	401 027 0309	CARBON	47K	JA 1/6W	1
R367	401 025 8208	CARBON	22K	JA 1/6W	1
R368	401 027 0309	CARBON	47K	JA 1/6W	1
R369	401 025 8208	CARBON	22K	JA 1/6W	1
R370	401 025 8208	CARBON	22K	JA 1/6W	1
R371	401 019 5800	CARBON	4.7	JA 1/4W	1
R372	401 024 7004	CARBON	1K	JA 1/6W	1
R373	401 027 5908	CARBON	68K	JA 1/6W	1
R374	401 027 0309	CARBON	47K	JA 1/6W	1
R392	401 025 8208	CARBON	22K	JA 1/6W	1
R701	401 025 3807	CARBON	180	JA 1/6W	1
R702	401 016 4806	CARBON	22K	JA 1/4W	1
GRAPHIC EQ. P.C.B. ASSY					
49	620 080 7371	Graphic EQ. P.C.B. Assy			1
VR401	620 006 3906	Slide Volume (W-100kΩx2, 100Hz)			1
VR402	620 006 3906	Slide Volume (W-100kΩx2, 1kHz)			1
VR403	620 006 3906	Slide Volume (W-100kΩx2, 10kHz)			1
VR404	620 006 3913	Slide Volume (W-100kΩ, Balance)			1
VR405	620 006 3890	Slide Volume (W-100kΩx2, Volume)			1
Q401	405 010 9805	TR 2SC1571-H-NP			1
or	405 010 9706	TR 2SC1571-G-NP			1
Q402	405 010 9805	TR 2SC1571-H-NP			1
or	405 010 9706	TR 2SC1571-G-NP			1
Q403	405 010 9805	TR 2SC1571-H-NP			1
or	405 010 9706	TR 2SC1571-G-NP			1
Q404	405 010 9805	TR 2SC1571-H-NP			1
or	405 010 9706	TR 2SC1571-G-NP			1
Q405	405 010 9805	TR 2SC1571-H-NP			1
or	405 010 9706	TR 2SC1571-G-NP			1
Q406	405 010 9805	TR 2SC1571-H-NP			1
or	405 010 9706	TR 2SC1571-G-NP			1
C401	403 047 1502	ELECT	4.7U	M 25V	1
C402	403 047 1502	ELECT	4.7U	M 25V	1
C403	403 071 6207	CERAMIC	220P	K 50V	1
C404	403 071 6207	CERAMIC	220P	K 50V	1
C405	403 026 5408	CERAMIC	47P	K 50V	1
C406	403 026 5408	CERAMIC	47P	K 50V	1
C407	403 042 0302	ELECT	10U	M 16V	1
C408	403 042 0302	ELECT	10U	M 16V	1
C409	403 050 1209	ELECT	2.2U	M 50V	1
C410	403 050 1209	ELECT	2.2U	M 50V	1
C411	403 061 8303	POLYESTER	4700P	K 50V	1
C412	403 061 8303	POLYESTER	4700P	K 50V	1
C413	403 048 3109	ELECT	0.22U	M 50V	1
C414	403 048 3109	ELECT	0.22U	M 50V	1
C415	403 056 7304	POLYESTER	1000P	J 50V	1
C416	403 056 7304	POLYESTER	1000P	J 50V	1
C417	403 059 6205	POLYESTER	0.022U	K 50V	1
C418	403 059 6205	POLYESTER	0.022U	K 50V	1
C419	403 047 1502	ELECT	4.7U	M 25V	1
C420	403 047 1502	ELECT	4.7U	M 25V	1
C421	403 074 9205	CERAMIC	680P	K 50V	1
C422	403 074 9205	CERAMIC	680P	K 50V	1
C423	403 059 6205	POLYESTER	0.022U	K 50V	1
C424	403 059 6205	POLYESTER	0.022U	K 50V	1
C425	403 042 3600	ELECT	100U	M 16V	1
R401	401 024 7004	CARBON	1K	JA 1/6W	1
R402	401 024 7004	CARBON	1K	JA 1/6W	1
R403	401 027 0507	CARBON	470K	JA 1/6W	1
R404	401 027 0507	CARBON	470K	JA 1/6W	1
R405	401 025 2305	CARBON	150K	JA 1/6W	1
R406	401 025 2305	CARBON	150K	JA 1/6W	1
R407	401 026 7002	CARBON	3.9K	JA 1/6W	1
R408	401 026 7002	CARBON	3.9K	JA 1/6W	1
R409	401 026 7002	CARBON	3.9K	JA 1/6W	1
R410	401 026 7002	CARBON	3.9K	JA 1/6W	1
R411	401 026 7606	CARBON	390K	JA 1/6W	1
R412	401 026 7606	CARBON	390K	JA 1/6W	1
R413	401 027 3201	CARBON	560K	JA 1/6W	1
R414	401 027 3201	CARBON	560K	JA 1/6W	1
R415	401 026 6609	CARBON	390	JA 1/6W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description				Q'ty
R416	401 026 6609	CARBON	390	JA	1/6W	1
R417	401 027 5502	CARBON	6.8K	JA	1/6W	1
R418	401 027 5502	CARBON	6.8K	JA	1/6W	1
R419	401 024 9305	CARBON	1.2K	JA	1/6W	1
R420	401 024 9305	CARBON	1.2K	JA	1/6W	1
R421	401 025 4903	CARBON	180K	JA	1/6W	1
R422	401 025 4903	CARBON	180K	JA	1/6W	1
R423	401 025 8703	CARBON	220K	JA	1/6W	1
R424	401 025 8703	CARBON	220K	JA	1/6W	1
R425	401 026 6609	CARBON	390	JA	1/6W	1
R426	401 026 6609	CARBON	390	JA	1/6W	1
R427	401 027 5502	CARBON	6.8K	JA	1/6W	1
R428	401 027 5502	CARBON	6.8K	JA	1/6W	1
R429	401 024 9305	CARBON	1.2K	JA	1/6W	1
R430	401 024 9305	CARBON	1.2K	JA	1/6W	1
R431	401 025 1605	CARBON	1.5K	JA	1/6W	1
R432	401 025 1605	CARBON	1.5K	JA	1/6W	1
R433	401 024 7004	CARBON	1K	JA	1/6W	1
R434	401 024 7004	CARBON	1K	JA	1/6W	1
R435	401 024 9701	CARBON	12K	JA	1/6W	1
R436	401 024 9701	CARBON	12K	JA	1/6W	1
MICOM P.C.B. ASSY						
50	620 187 7236	Micom P.C.B. Assy				1
	620 030 9523	LCD, FTD6859				1
	620 031 4763	Wire Wrap Terminal				4
	620 053 9821	Reflector				1
	620 054 1275	Filter				1
PC601	620 055 2646	Jumper				1
PC602	620 055 4169	Jumper				1
PC603	620 055 2660	Jumper				1
PC604	620 024 3162	Wire 3 Parallel				1
PC606	620 055 4268	Jumper				1
CX601	620 007 1338	Crystal 7.2MHz				1
or	620 007 3226	Crystal 7.2MHz				1
VR601	620 006 1360	Potentiometer (B-22kΩ, FM Muting)				1
VR602	620 006 1384	Potentiometer (B-220kΩ, AM Auto Stop)				1
D601	407 012 8503	DIODE 1SS53				1
D605	407 077 0504	DIODE 1SS133-K				1
D607	407 077 0504	DIODE 1SS133-K				1
IC601	409 142 3205	IC TSE4039F009				1
Q602	405 010 9805	TR 2SC1571-H-NP				1
or	405 017 9808	TR 2SC3330-V				1
Q603	405 017 9808	TR 2SC3330-V				1
or	405 017 9709	TR 2SC3330-U				1
Q604	405 017 9808	TR 2SC3330-V				1
or	405 017 9709	TR 2SC3330-U				1
Q605	405 004 5202	TR 2SA608-G-SP				1
or	405 004 4700	TR 2SA608-F-SP				1
Q606	405 010 9805	TR 2SC1571-H-NP				1
or	405 017 9808	TR 2SC3330-V				1
Q607	405 016 0806	TR 2SC2839-E				1
C601	403 001 1906	CERAMIC	0.01U	M	16V	1
C602	403 040 4807	ELECT	220U	M	10V	1
C603	403 040 6702	ELECT	2200U	M	10V	1
C604	403 022 7703	CERAMIC	33P	J	50V	1
C605	403 022 7703	CERAMIC	33P	J	50V	1
C606	403 001 1906	CERAMIC	0.01U	M	16V	1
C607	403 039 2906	ELECT	47U	M	6.3V	1
C608	403 001 1906	CERAMIC	0.01U	M	16V	1
C609	403 068 9402	CERAMIC	100P	K	50V	1
C610	403 061 8303	POLYESTER	4700P	K	50V	1
C611	403 069 1207	CERAMIC	1000P	K	50V	1
C612	403 049 1609	ELECT	1U	M	50V	1
C613	403 038 7209	ELECT	220U	M	6.3V	1
C614	403 001 1906	CERAMIC	0.01U	M	16V	1
C615	403 001 1906	CERAMIC	0.01U	M	16V	1
C617	403 039 2906	ELECT	47U	M	6.3V	1
R601	401 024 6700	CARBON	100	JA	1/6W	1
R602	401 027 2600	CARBON	5.6K	JA	1/6W	1
R603	401 025 7409	CARBON	220	JA	1/6W	1
R605	401 025 1605	CARBON	1.5K	JA	1/6W	1
R606	401 021 3009	CARBON	5.6K	JA	1/4W	1
R607	401 021 3009	CARBON	5.6K	JA	1/4W	1
R608	401 025 8208	CARBON	22K	JA	1/6W	1
R609	401 024 7707	CARBON	100K	JA	1/6W	1
R610	401 024 7004	CARBON	1K	JA	1/6W	1
R611	401 025 7805	CARBON	2.2K	JA	1/6W	1
R612	401 026 4605	CARBON	33K	JA	1/6W	1

Ref. No.	Part No.	Description				Q'ty
R613	401 026 6609	CARBON	390	JA	1/6W	1
R614	401 024 7004	CARBON	1K	JA	1/6W	1
R615	401 018 4101	CARBON	3.3K	JA	1/4W	1
R616	401 018 3807	CARBON	3.3K	JA	1/4W	1
R617	401 018 3807	CARBON	3.3K	JA	1/4W	1
R618	401 018 3807	CARBON	3.3K	JA	1/4W	1
R619	401 012 7009	CARBON	10K	JA	1/4W	1
R620	401 012 7009	CARBON	10K	JA	1/4W	1
R621	401 012 7009	CARBON	10K	JA	1/4W	1
R622	401 012 7009	CARBON	10K	JA	1/4W	1
R623	401 025 8703	CARBON	220K	JA	1/6W	1
R624	401 026 9303	CARBON	47	JA	1/6W	1
R625	401 025 7102	CARBON	22	JA	1/6W	1
R626	401 025 7409	CARBON	220	JA	1/6W	1
R629	401 024 6403	CARBON	10	JA	1/6W	1
R630	401 026 1000	CARBON	2.7K	JA	1/6W	1
FUNCTION P.C.B. ASSY						
51	620 080 7395	Function P.C.B. Assy				1
PC201	620 024 2424	Wire 3 Parallel				1
PC202	620 024 2127	Wire 3 Parallel				1
PC203	620 024 2127	Wire 3 Parallel				1
PC204	620 024 2127	Wire 3 Parallel				1
PC205	620 024 2455	Wire 3 Parallel				1
SW302	620 015 3966	Push Switch 4 key (Function SW.)				1
R261	401 026 1307	CARBON	27K	JA	1/6W	1
R262	401 026 1307	CARBON	27K	JA	1/6W	1
R263	401 027 2600	CARBON	5.6K	JA	1/6W	1
R264	401 027 2600	CARBON	5.6K	JA	1/6W	1
R265	401 026 4605	CARBON	33K	JA	1/6W	1
R266	401 026 4605	CARBON	33K	JA	1/6W	1
R267	401 024 7707	CARBON	100K	JA	1/6W	1
R268	401 024 7707	CARBON	100K	JA	1/6W	1
R269	401 024 7707	CARBON	100K	JA	1/6W	1
R270	401 024 7707	CARBON	100K	JA	1/6W	1
R271	401 025 8703	CARBON	220K	JA	1/6W	1
R272	401 025 8703	CARBON	220K	JA	1/6W	1
DUBBING SWITCH P.C.B. ASSY						
52	620 080 7401	Dubbing Switch P.C.B. Assy				1
	620 031 4763	Wire Wrap Terminal				3
PC301	620 024 2004	Wire 6 Parallel				1
PC303	620 055 2479	Jumper				1
PC304	620 024 2363	Wire 5 Parallel				1
PC305	620 024 2004	Wire 6 Parallel				1
PC306	620 055 4039	Jumper				1
SW303	620 015 3355	Push Switch 4 key (DUB/HS/SW)				1
D311	407 077 0504	DIODE 1SS133-K				1
D312	407 077 0504	DIODE 1SS133-K				1
D313	407 077 0504	DIODE 1SS133-K				1
D314	407 077 0504	DIODE 1SS133-K				1
D315	407 077 0504	DIODE 1SS133-K				1
D316	407 077 0504	DIODE 1SS133-K				1
D317	407 077 0504	DIODE 1SS133-K				1
D318	407 077 0504	DIODE 1SS133-K				1
D319	407 077 0504	DIODE 1SS133-K				1
Q315	405 017 9709	TR 2SC3330-U				1
or	405 017 9600	TR 2SC3330-T				1
R381	401 024 7400	CARBON	10K	JA	1/6W	1
R382	401 024 7707	CARBON	100K	JA	1/6W	1
R383	401 026 4308	CARBON	3.3K	JA	1/6W	1
R384	401 026 4308	CARBON	3.3K	JA	1/6W	1
R385	401 026 4308	CARBON	3.3K	JA	1/6W	1
R386	401 010 2501	CARBON	47	JA	1/2W	1
INDICATOR P.C.B. ASSY						
53	620 080 7418	Indicator P.C.B. Assy				1
D321	407 106 5500	LED ULP-R73B-50 (Record)				1
or	407 028 8900	LED SLP-173B-01				1
D322	407 106 5500	LED ULP-R73B-50 (Dubbing)				1
or	407 028 8900	LED SLP-173B-01				1
D323	407 106 5500	LED ULP-R73B-50 (High Speed)				1
or	407 028 8900	LED SLP-173B-01				1
R391	401 025 1605	CARBON	1.5K	JA	1/6W	1
R392	401 025 1605	CARBON	1.5K	JA	1/6W	1
R393	401 014 4105	CARBON	1.5K	JA	1/4W	1
BAND SWITCH P.C.B. ASSY						
54	620 080 7425	Band Switch P.C.B. Assy				1

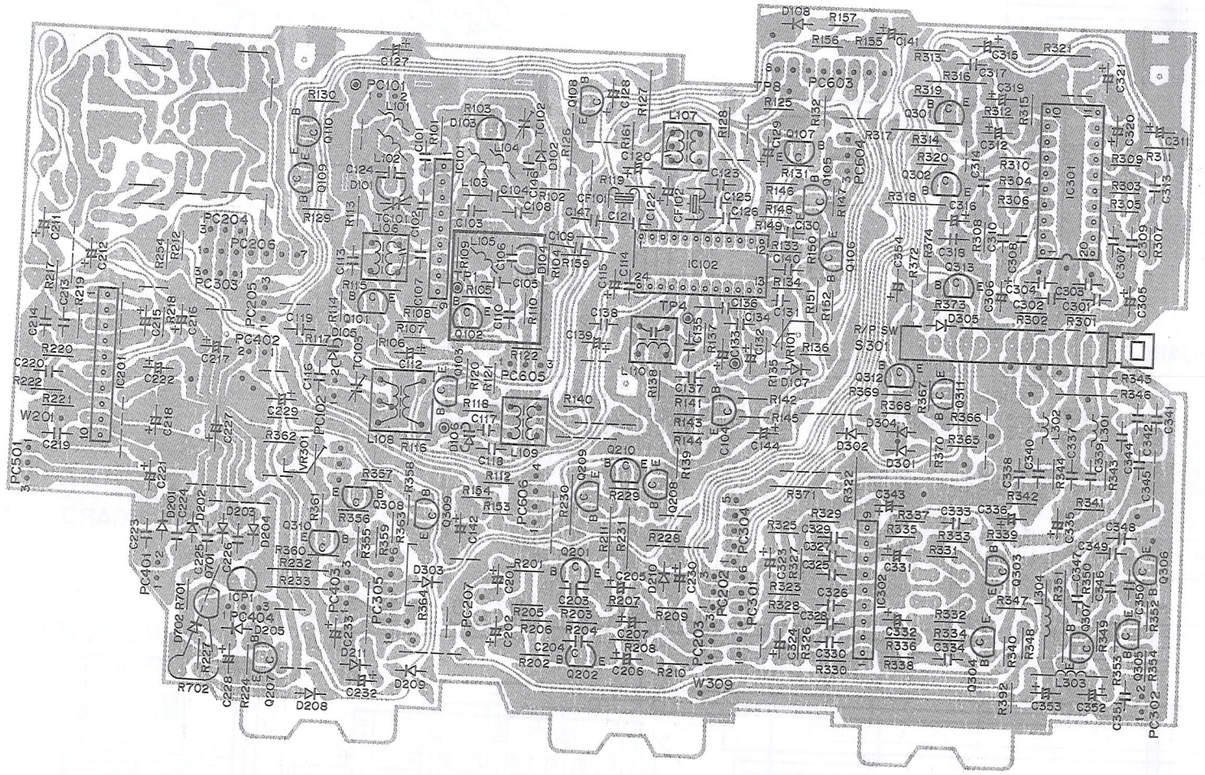
P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
SW601	620 015 1917	Keyboard Switch 6 mm (Up)	1
SW602	620 015 1917	Keyboard Switch 6 mm (Down)	1
SW603	620 015 1917	Keyboard Switch 6 mm (FM)	1
SW604	620 015 1917	Keyboard Switch 6 mm (AM)	1
SW605	620 015 1917	Keyboard Switch 6 mm (MANUAL/AUTO)	1
MEMORY SWITCH P.C.B. ASSY			
55	620 080 7432	Memory Switch P.C.B. Assy	1
SW606	620 015 1917	Keyboard Switch 6 mm (M1)	1
SW607	620 015 1917	Keyboard Switch 6 mm (M2)	1
SW608	620 015 1917	Keyboard Switch 6 mm (M3)	1
SW609	620 015 1917	Keyboard Switch 6 mm (M4)	1
SW610	620 015 1917	Keyboard Switch 6 mm (M5)	1
SW611	620 015 1917	Keyboard Switch 6 mm (M6)	1
BEAT SWITCH P.C.B. ASSY			
56	620 080 7449	Beat Switch P.C.B. Assy	1
SW304	620 015 3508	Slide Switch 2P2T (Beat SW.)	1
LAMP P.C.B. ASSY			
57	620 080 7456	Lamp P.C.B. Assy	1
	620 030 8151	Lamp	2
	620 052 0171	Spacer	2
AUX P.C.B. ASSY			
58	620 080 7463	AUX P.C.B. Assy	1
	620 020 4736	Pin Jack 2P (AUX)	1
JACK P.C.B. ASSY			
59	620 080 7487	Jack P.C.B. Assy	1
	620 017 8228	Jack 7P Black (Phones)	1
R291	401 007 0107	CARBON 100 JA 1/2W	1
R292	401 007 0107	CARBON 100 JA 1/2W	1
LOOP ANTENNA TERMINAL P.C.B. ASSY			
60	620 080 7494	Loop Antenna Terminal P.C.B. Assy	1
FUSE P.C.B. ASSY			
61	620 187 5126	Fuse P.C.B. Assy	1
	620 017 2738	Fuse Clip	2
⚠	423 006 1701	FUSE 250V 2A	1
AC IN P.C.B. ASSY			
62	620 187 5140	AC In P.C.B. Assy	1
	620 022 2587	EC Terminal 1P	2
	620 031 4763	Wire Wrap Terminal	3
POWER SWITCH P.C.B. ASSY			
63	620 187 7243	Power Switch P.C.B. Assy	1
	620 053 6899	Cover Safety	1
⚠	620 015 2341	Switch Push Power	1
C261 ⚠	620 006 6679	Capacitor 0.01MF400V	1
TRANSISTOR 12V P.C.B. ASSY			
64	620 187 7250	Transistor 12V P.C.B. Assy	1
Q206	405 035 7602	TR KSD288-Y	1
TRANSISTOR 11V P.C.B. ASSY			
65	620 187 7267	Transistor 11V P.C.B. Assy	1
Q211	405 035 7602	TR KSD288-Y	1
SPEAKER P.C.B. ASSY			
66	620 080 7470	Speaker P.C.B. Assy	1
	620 020 4736	Pin Jack 2P (Speakers)	1
PC502	620 024 3070	Wire 3 Parallel	1

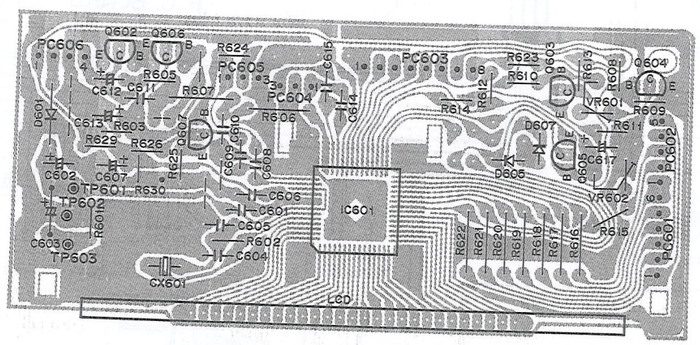
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

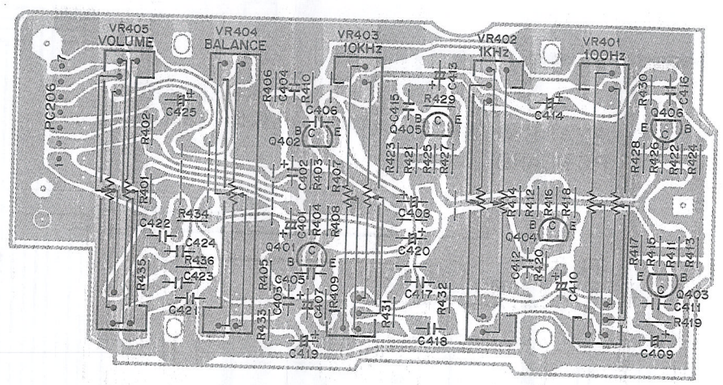
AMPLIFIER PRINTED CIRCUIT BOARD
(BOTTOM VIEW)



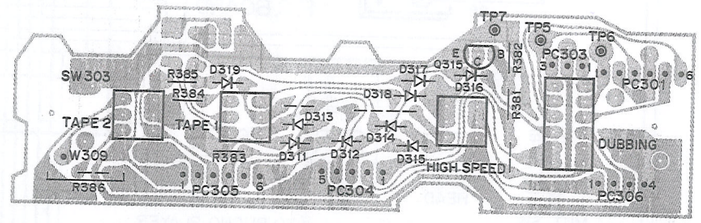
MICON PRINTED CIRCUIT BOARD
(BOTTOM VIEW)



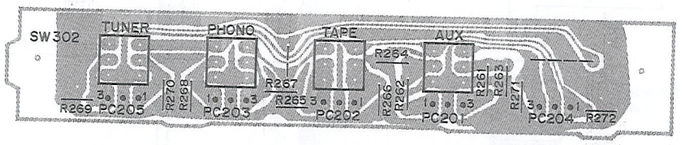
GRAPHIC EQUALIZER PRINTED CIRCUIT BOARD
(BOTTOM VIEW)



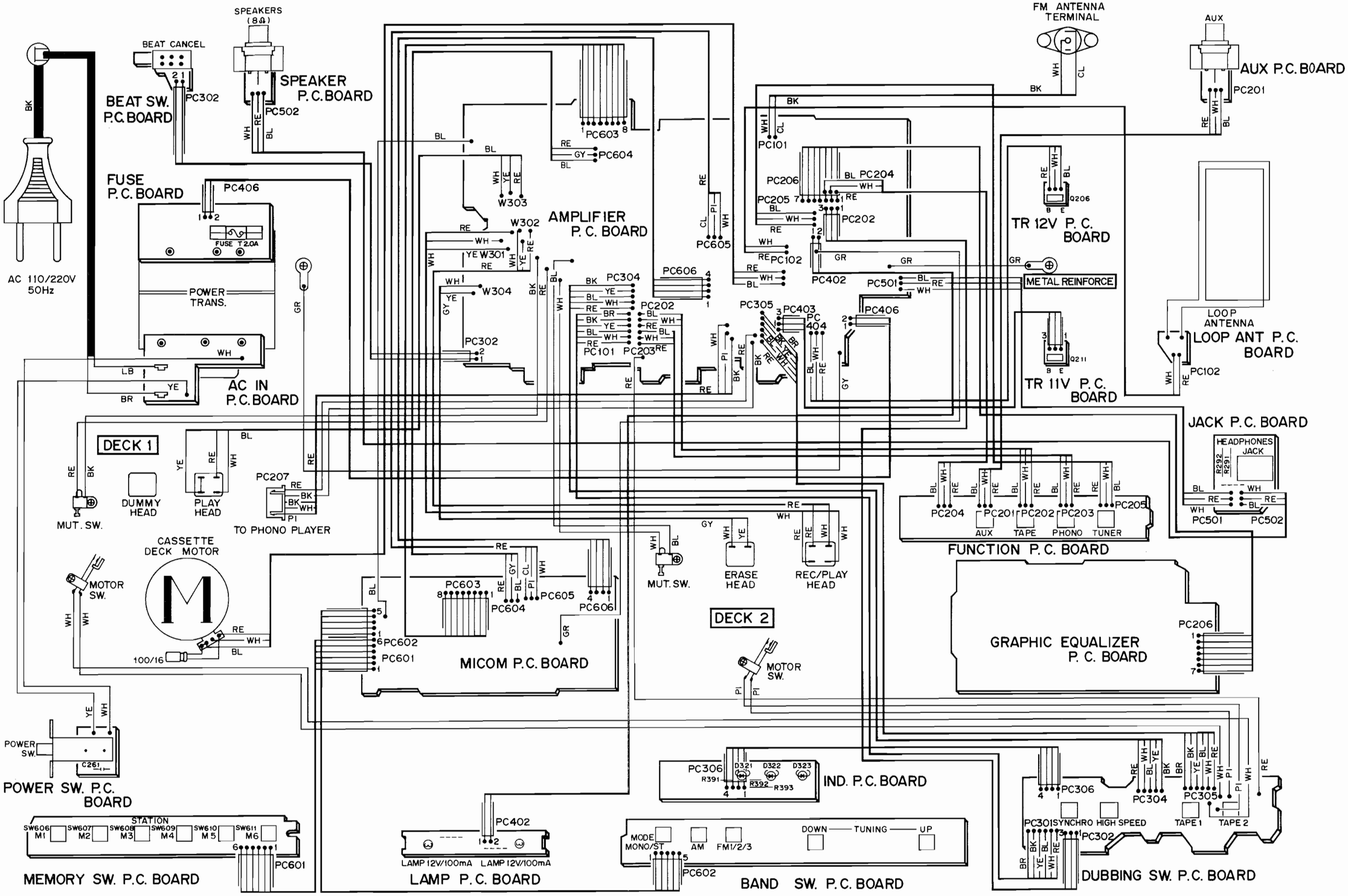
DUBBING SW. PRINTED CIRCUIT BOARD
(BOTTOM VIEW)



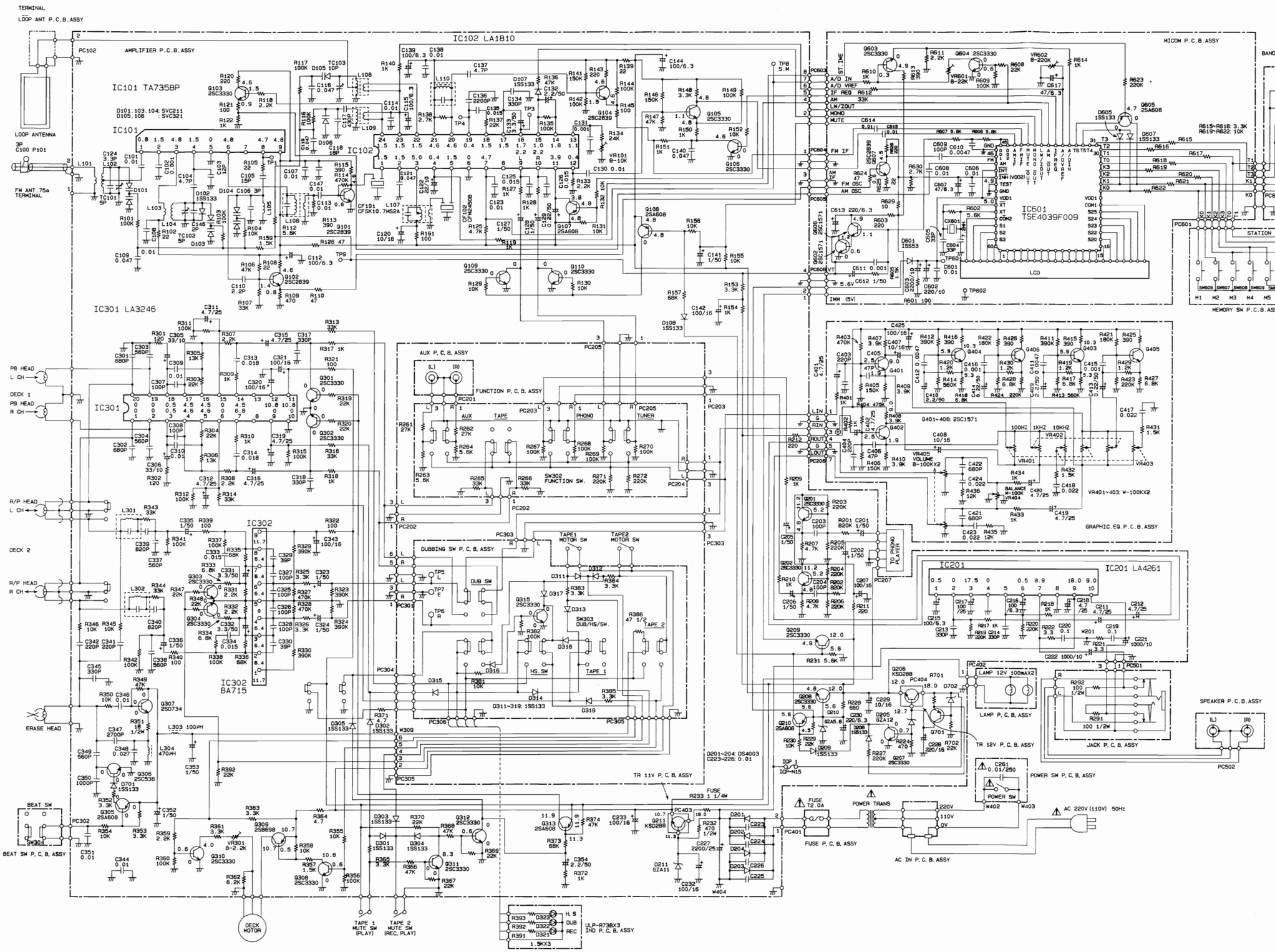
FUNCTION PRINTED CIRCUIT BOARD
(BOTTOM VIEW)



POINT TO POINT WIRING DIAGRAM

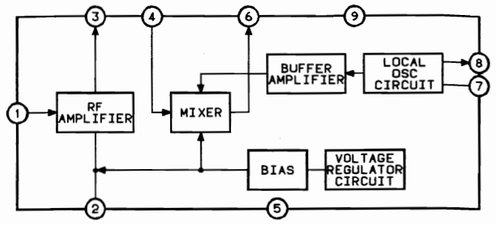


SCHEMATIC DIAGRAM

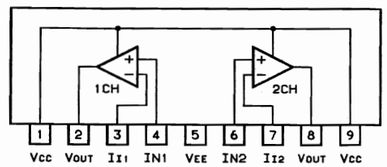


INTEGRATED CIRCUIT BLOCK DIAGRAM

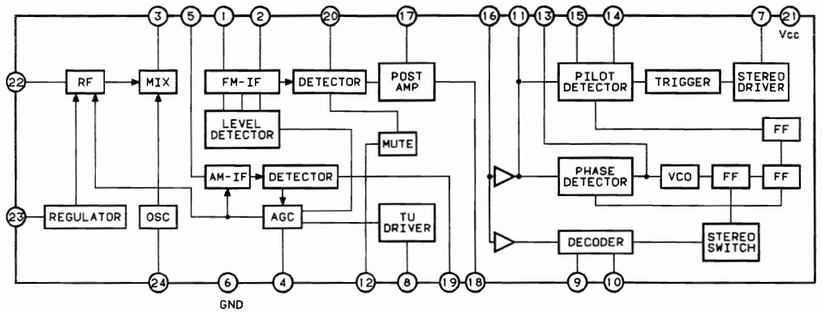
FM FRONT END IC TA 7358AP



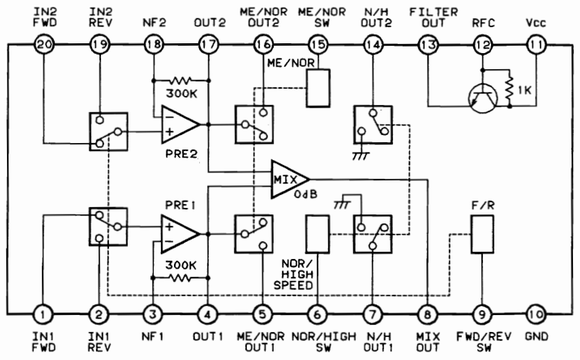
REC/PLAY PREAMP IC BA 715



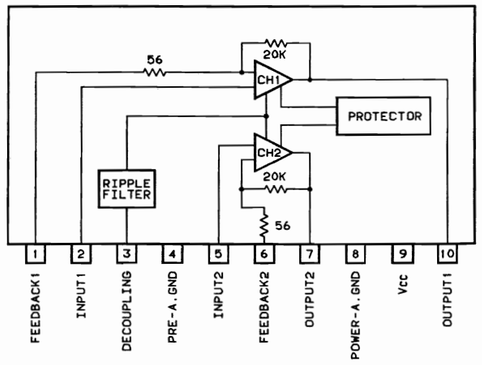
AM/FM IF AMP & MPX IC LA 1810



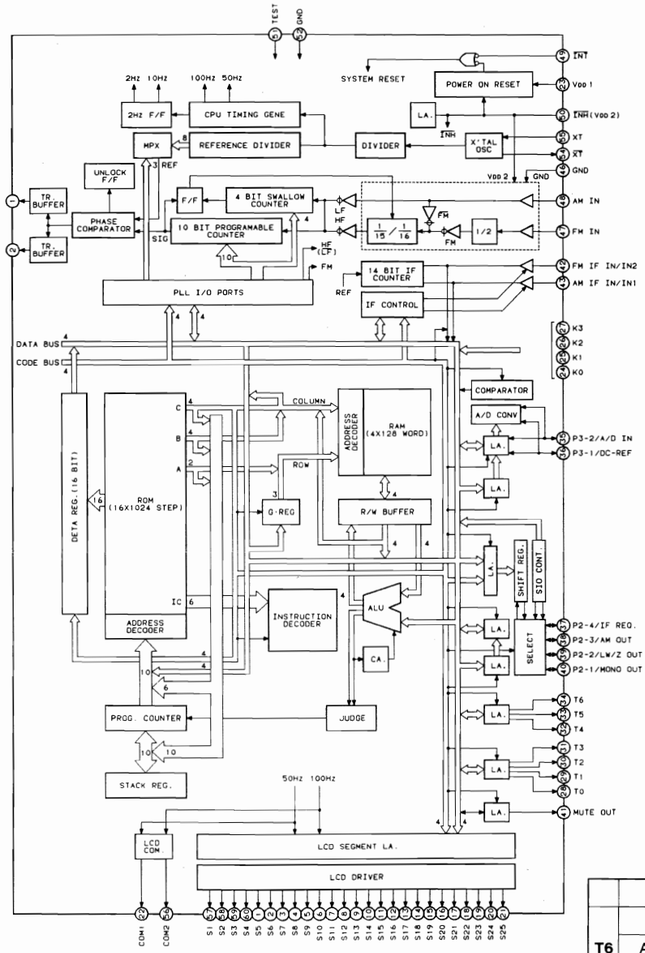
CASSETTE DECK PLAY AMP IC LA 3246



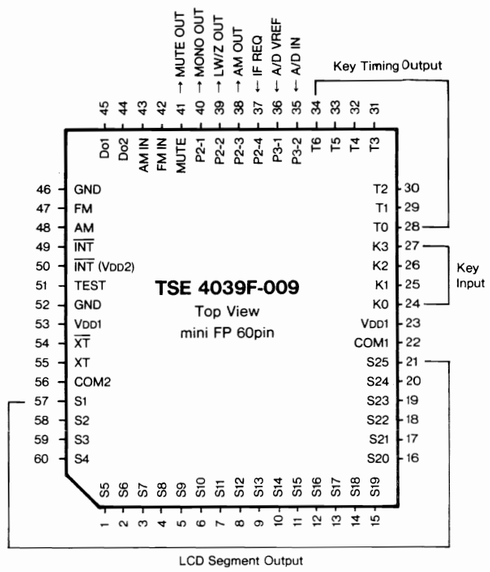
POWER AMPLIFIER IC LA 4261



CPU PORT DESIGNATIONS (TSE 4039F-009)



TSE 4039F-009 OUTLINE

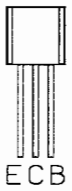
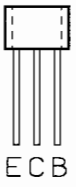
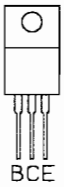


PORT ASSIGNMENT

Port	Pin No.	Name	Assignment	Active	Initial
MUTE	41	MUTE	MUTE Output	L	H
P2-1	40	MONO OUT	MONO Output	L	H
P2-2	39	LW OUT	LW BAND Output	L	H
P2-3	38	AM OUT	AM BAND Output	L	H
P2-4	37	IF REQ.	IF REQ. Output	H	L
P3-1	36	DC REF.	DC REF. Input	*	*
P3-2	36	A/D IN	A/D Converter Input	*	*
AM IF IN	43	AM IF IN	AM IF Counter Input	*	*
FM IF IN	47	FM IF IN	FM IF Counter Input	*	*

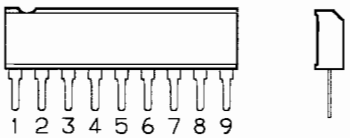
	K3	K2	K1	K0	
T6	No. 43 Pin	No. 42 Pin			T6
	AM IF Counter	FM IF Counter	Stereo Ind. Output	Auto Tuning	
	AM Tuned IN	FM Tuned IN		Manual Only	
T5	IF Offset		MW Step	FM Step	T5
	Upper +10.7MHz	Signal Meter	10kHz	100kHz	
	Lower −10.7MHz		9kHz	50kHzN	
T4	AM Band	LW Band	MW Band	FM Band	T4
	2 Band MW	153~360kHz	520~1710kHz	87.5~108MHz	
			522~1629kHz		
	3 Band MW/LW	153~281kHz	530~1600kHz	76.0~90.0MHz	
			531~1602kHz		
T3	Z	Memory Scan	AM	FM	T3
T2	INT	INT	Down	Up	T2
T1	M5	M6	INT	Auto/Manual	T1
				Stereo/Mono	
T0	M4	M3	M2	M1	T0
	K3	K2	K1	K0	

IC & TRANSISTOR LEAD IDENTIFICATION

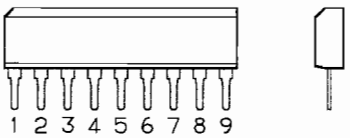
TRANSISTOR	FRONT VIEW	BOTTOM VIEW	TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SB698 2SC1571 2SC536 2SD734			2SA608 2SC2839 2SC3330 2SC3330		
KSD288					

TERMINAL NAME
B → BASE C → COLLECTOR E → EMITTER

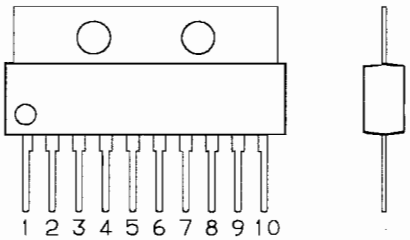
BA715 FRONT/SIDE VIEWS



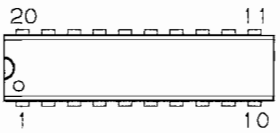
TA7358P FRONT/SIDE VIEWS



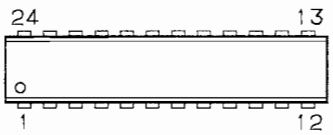
LA4261 FRONT/SIDE VIEWS



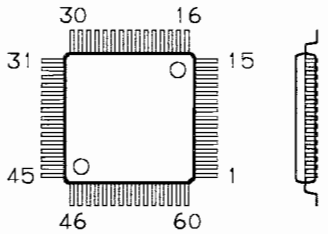
LA3246 TOP VIEW



LA1810 TOP VIEW



TSE4039F009 TOP/SIDE VIEWS



FISHER Hi-Fi Europa Vertriebs GmbH

Stahlgruberring 4
8000 München 82

Tel: 089/420 45-0
Tlx: 524033

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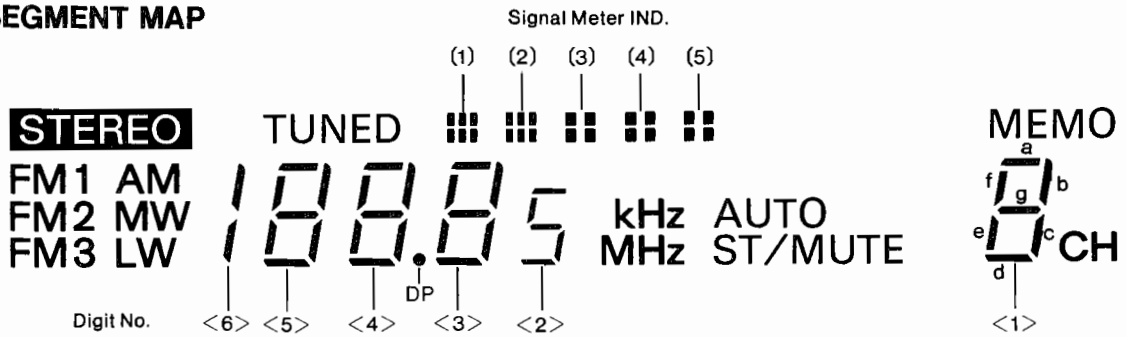
LCD SEGMENT MAP



Symbol	Pin No.	Segment Name		Explanation Function	
		COM1	COM2	COM1	COM2
COM1	22	COM1	—	LCD COM1	—
S25	21	LW	FM3	3 Band LW	FM3
S24	20	MW	FM2	3 Band MW	FM2
S23	19	AM	FM1	2 Band AM	FM1
S22	18	(2)	STEREO	Signal Meter Ind. (2)	STEREO
S21	17	(1)	TUNED	Signal Meter Ind. (1)	TUNED
S20	16	5g	5e	188.85 8	188.85 8
S19	15	5c	5d	188.85 8	188.85 8
S18	14	5b	5f	188.85 8	188.85 8
S17	13	5a	6bc	188.85 8	188.85 8
S16	12	4g	4e	188.85 8	188.85 8
S15	11	4c	4d	188.85 8	188.85 8
S14	10	4b	4f	188.85 8	188.85 8
S13	9	4a	DP	188.85 8	188.85 8
S12	8	3g	3e	188.85 8	188.85 8
S11	7	3c	3d	188.85 8	188.85 8
S10	6	3b	3f	188.85 8	188.85 8
S9	5	3a	2acdfg	188.85 8	188.85 8
S8	4	(4)	(3)	Signal Meter Ind. (4)	Signal Meter Ind. (3)
S7	3	kHz	MHz	kHz	MHz
S6	2	AUTO	ST/MUTE	AUTO	ST/MUTE
S5	1	MEMO	(5)	MEMO	Signal Meter Ind. (5)
S4	60	1g	1e	188.85 8	188.85 8
S3	59	1c	1d	188.85 8	188.85 8
S2	58	1b	1f	188.85 8	188.85 8
S1	57	1a	CH	188.85 8	CH
COM2	56	—	COM2	—	LCD COM2